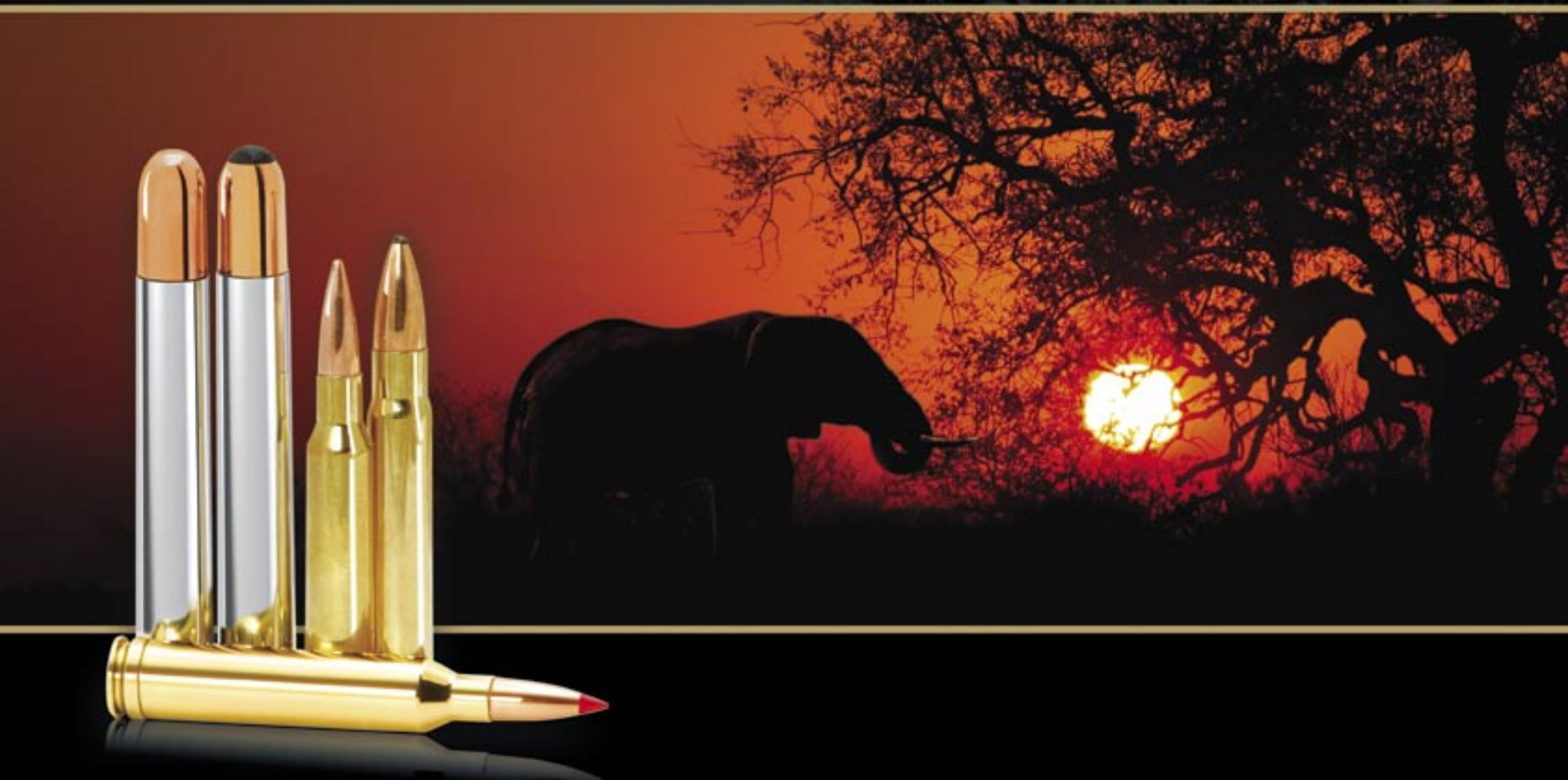
ENG

norma

DREAMS – PASSION – PRIDE



DREAMS

Everyone is influenced by their dreams. Dreams are part of one's personality.

A hunter always has his most beautiful trophy and a target shooter his biggest victory in front of him.

Such dreams are important, as is the ammunition.

We consistently strive for new and better products. In our new, modern laboratory, with access to technically advanced equipment and skilled staff, exhaustive testing is undertaken before starting commercial production.

In 1902, Norma commenced production of bullets in Åmotfors and at the end of the 1950´s some 20 calibers with 30 different loads were being produced.

Today, we manufacture about 90 calibers with 300 different loads, from 222 Rem. to 505 Gibbs.

Since the company was started, Norma has manufactured about 700 different cartridge loadings. Many of these are on display in our new conference premises.

PASSION

At Norma, second place is not an option.

Intuition seldom lets us down and there is no substitute for victory.

NATASHA ILLUM BERG GREW UP AT ERIKSBERG IN BLEKINGE, SWEDEN.

SHE HAS LIVED IN TANZANIA SINCE 1993 WHERE SHE WORKS AS A PROFESSIONAL HUNTER.

www.natashaillumberg.com

The view from 2007 is that of population growth, urbanised thinking and the exploitation of nature as opposed to the understanding and respect of it. So it is the task of the hunter, now more than ever, to give his or her passion for nature, hunting and adventure an economically viable and ethically defendable place in the ecosystem. Smart hunting! Something of which one can speak with a clear and proud voice. To shy away never works in anything.

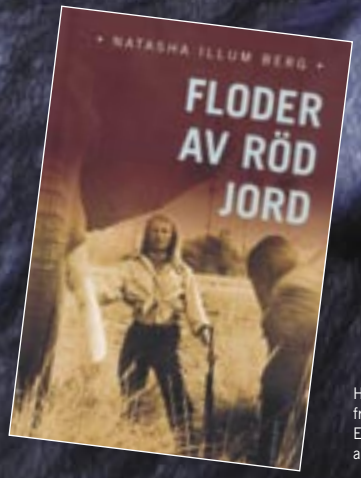
I understood a while ago, that is the only way my 458 Lott and I will have a future in Africa.

Because I do love them, the buffaloes.

Slowly but surely, I am returning to hunting the way they did it in the old days, when the explorers and old time hunters fared through Africa. The notion of walking on foot with porters is to me the picture of bliss. Without the kind of hunter in sight who's aim it is to kill and leave the country as fast as possible, without the strangling effect of a measure tape around my neck, the clients and I venture in to the heart of the matter, for some proper challenges.

Silently we stalk the game, trusting nature to be at its boldest and the gun to shoot at its straightest.

Natasha Illum Berg



Her passion for Africa is evident from her books "Rivers of Red Earth", "Tea on the blue sofa" and "So Wanton a God".

PRIDE

There are those who do not like fire-arms, hunting, hunters and shooters. This we respect but will always, clearly and openly declare where we stand – and not without pride.

Torbjörn Lindskog,
CEO

Norma African PH – pack a real punch!

Muzzle energy is a measure of the effectiveness of different cartridges and calibers. Many African hunters use this method to select a suitable caliber for hunting.

The Norma African PH is based on a different concept, developed in collaboration with some legendary, professional hunters (PH) in Africa. These professionals prefer cartridges which are loaded with heavy, reliable bullets for deep and straight penetration through heavy bone and muscle and which are able to stop all of the "Big Five" every time.

A caliber with a heavy bullet gives a high sectional density (SD), Momentum and Knock-Out-Value (KO), characteristics which professional hunters look for in their ammunition. It can be decisive in all big game hunting. This experience by professional hunters is the basis for African PH – inspired by Kevin Robertson – produced by Norma.

norma AFRICAN PH THE PERFECT SHOT

INESCAPABLE KNOCK OUT • MAXIMUM MOMENTUM • UNEQUALED PENETRATION

NORMA AFRICAN PH WITH WOODLEIGH BULLETS

The best for the beast. Dangerous Big Game deserve truly field-proven components. Norma quality, nickel plated cases loaded with the tough Woodleigh bullets will give you that comfortable solid assurance as will Kynoch-profiled, unbreakable full metal jackets or tough gilding metal soft nose bullets.

Make your choice!

BONDED SOFT NOSE

Woodleigh's Weldcore Soft Nose is made from 1.6mm thick gilding metal tapered to provide for reliable expansion. The lead core is fused to the gilding metal inner walls to ensure maximum weight retention, together with a Kynoch profile for ease of regulating double rifles.

FULL METAL JACKET

For truly maximum penetration, Woodleigh's full metal jackets are made from tough steel, with a 2mm thick reinforced nose section. The jacket tapers towards the base to assist rifling engraving and the jacket base is turned back into the lead to reinforce the heel. Kynoch-style profile for ease of regulating double rifles.

HARRY SELBY AND ROBERT RUARK WITH A 100 POUNDER.

Harry Selby and Norma Products

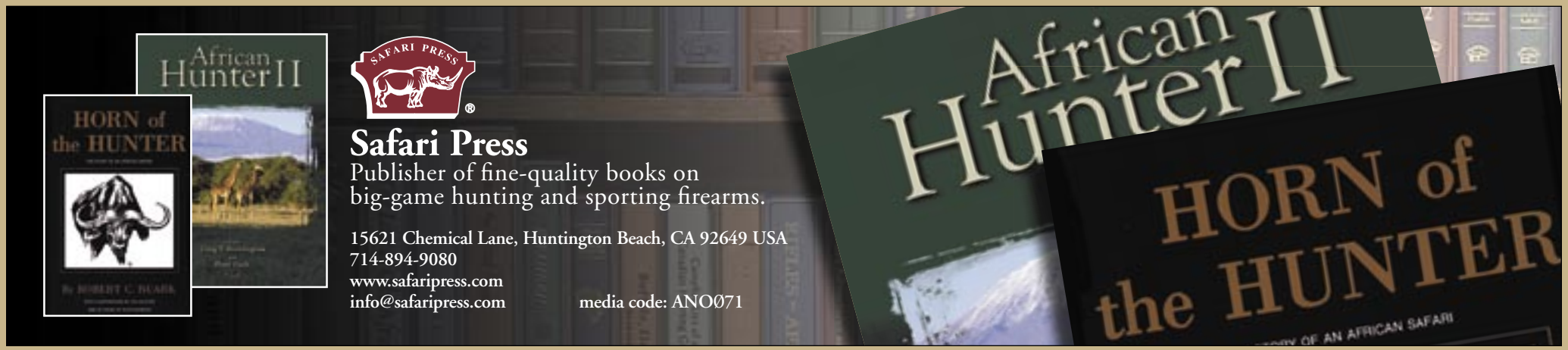
Photo by Mats Bergholm.

"I did use a lot of Norma 416 Rigby Ammo, both Solid and Soft Point. Norma brought out its own 416 Rigby ammo in a big yellow box with the 416 cartridge picture on it, also headstamped Norma. I found it to be excellent ammunition and always used it when I could get it. Indeed I used Norma ammo in other calibers as well and never had any reason to complain.

Bahati mzuri muindajie
Good luck with your hunting

HARRY SELBY

HARRY SELBY – was born in 1925. Harry participated in his first safari in 1945 under the tutelage of Phil Percival. He conducted his last professional safari in the year 2000. Due to a knee problem which unsuccessful surgery had exacerbated, he was unable to continue professional hunting. During the period 1945 to 2000 he hunted professionally each season without break. As a white hunter, Harry made the record books as the longest-operating career professional hunter ever, but he has also made history as one of Africa's finest and most-respected professional hunters.



375 HOLLAND & HOLLAND MAGNUM

375 H&H Magnum is often called The Queen of African mediums. And this versatile cartridge introduced by Holland&Holland in 1912 is an African Queen. 375 H&H Magnum is probably the most used big game cartridge through all of its history, and has taken its share of all African big game. And the 375 H&H Magnum is just getting better with the newest loadings.

SOFT NOSE 22,7 G/350 GR — SD 0.356
CARTRIDGE NO. 20 **19525** 2 — BC 0.321

Distance, yards	0	50	100	150	200
Velocity, fps	2300	2179	2062	1949	1840
Trajectory, inches	-1.6	0.1	⊕	-2.2	-6.6
Energy, ft-lb	4112	3692	3306	2954	2633
Momentum, lb-f/s	115	109	103	98	92

FULL METAL JACKET 22,7 G/350 GR — SD 0.356
CARTRIDGE NO. 20 **19526** 2 — BC 0.307

Distance, yards	0	50	100	150	200
Velocity, fps	2300	2174	2052	1934	1821
Trajectory, inches	-1.6	0.1	⊕	-2.2	-6.7
Energy, ft-lb	4112	3674	3273	2908	2578
Momentum, lb-f/s	115	109	103	97	91

Barrel length 24 inches • 10 cartridges/box.

375 FLANGED MAGNUM NITRO EXPRESS

In 1912, a famous pair of big game cartridges came along: the belted 375 H&H Magnum for bolt action rifles and the 375 H&H Flanged Magnum for double rifles. No equivalent pair of big game cartridges for bolt action and double rifles was available – until today. Hunters who want a rimmed cartridge for their double rifles can now load with the Norma 375 H&H Flanged Magnum.

SOFT NOSE 22,7 G/350 GR — SD 0.356
CARTRIDGE NO. 20 **19504** 2 — BC 0.321

Distance, yards	0	50	100	150	200
Velocity, fps	2200	2082	1969	1859	1754
Trajectory, inches	-1.6	0.2	⊕	-2.5	-7.4
Energy, ft-lb	3762	3371	3013	2686	2391
Momentum, lb-f/s	110	104	98	93	88

FULL METAL JACKET 22,7 G/350 GR — SD 0.356
CARTRIDGE NO. 20 **19506** 2 — BC 0.307

Distance, yards	0	50	100	150	200
Velocity, fps	2200	2077	1958	1844	1735
Trajectory, inches	-1.6	0.2	⊕	-2.5	-7.5
Energy, ft-lb	3762	3354	2982	2644	2340
Momentum, lb-f/s	110	104	98	92	87

Barrel length 24 inches • 10 cartridges/box.

404 RIMLESS NITRO EXPRESS JEFFERY

Introduced in 1909 and chambered in Mauser action, the 404 became the workhorse of several African Game Departments.

Not nearly as famous as other cartridges for African Big Game, but much more widely used. The 10.75x73 in modern loadings is better than ever, and will remain one of the greatest cartridges for Big Game in Africa.

SOFT NOSE 29,2 G/450 GR — SD 0.359
CARTRIDGE NO. 20 11030 2 — BC 0.365

Distance, yards	0	50	100	150	200
Velocity, fps	2150	2048	1949	1853	1760
Trajectory, inches	-1.6	0.2	⊕	-2.5	-7.6
Energy, ft-lb	4620	4191	3795	3430	3096
Momentum, lb-f/s	138	132	125	119	113

FULL METAL JACKET 29,2 G/450 GR — SD 0.359
CARTRIDGE NO. 20 11031 2 — BC 0.360

Distance, yards	0	50	100	150	200
Velocity, fps	2150	2046	1946	1849	1755
Trajectory, inches	-1.6	0.2	⊕	-2.5	-7.6
Energy, ft-lb	4620	4185	3784	3416	3078
Momentum, lb-f/s	138	132	125	119	113

Barrel length 24 inches • 10 cartridges/box.

416 REMINGTON MAGNUM

416 Remington Magnum is the first American-made 416, and it came in 1988 because of growing interest in the 416 caliber for hunting in Africa. 416 Remington Magnum has the advantage of fitting into many common magnum actions that can take 375 H&H, yet it delivers more or less the same ballistics and energy as the old 416 Rigby. That is enough for the whole game!

SOFT NOSE 29,2 G/450 GR — SD 0.371
CARTRIDGE NO. 20 11072 2 — BC 0.338

Distance, yards	0	50	100	150	200
Velocity, fps	2150	2040	1933	1830	1731
Trajectory, inches	-1.6	0.3	⊕	-2.6	-7.7
Energy, ft-lb	4620	4158	3735	3347	2996
Momentum, lb-f/s	138	131	124	118	111

FULL METAL JACKET 29,2 G/450 GR — SD 0.371
CARTRIDGE NO. 20 11073 2 — BC 0.325

Distance, yards	0	50	100	150	200
Velocity, fps	2150	2035	1925	1818	1716
Trajectory, inches	-1.6	0.3	⊕	-2.6	-7.8
Energy, ft-lb	4620	4141	3702	3303	2942
Momentum, lb-f/s	138	131	124	117	110

Barrel length 24 inches • 10 cartridges/box.

416 RIGBY

The 416 Rigby is one of the most famous cartridges for Africa. It was introduced in 1911 and with strong bullets and low pressures it was always reliable when hunting dangerous game. With the new interest in classic African cartridges 416 Rigby is seeing a new spring, and more 416 Rigby rifles are being built than ever before.

SOFT NOSE 29,2 G/450 GR — SD 0.371
CARTRIDGE NO. 20 11070 2 — BC 0.338

Distance, yards	0	50	100	150	200
Velocity, fps	2150	2040	1933	1830	1731
Trajectory, inches	-1.6	0.3	⊕	-2.6	-7,7
Energy, ft-lb	4620	4158	3735	3347	2996
Momentum, lb-f/s	138	131	124	118	111

FULL METAL JACKET 29,2 G/450 GR — SD 0.371
CARTRIDGE NO. 20 11071 2 — BC 0.325

Distance, yards	0	50	100	150	200
Velocity, fps	2150	2035	1925	1818	1716
Trajectory, inches	-1.6	0.3	⊕	-2.6	-7,8
Energy, ft-lb	4620	4141	3702	3303	2942
Momentum, lb-f/s	138	131	124	117	110

Barrel length 24 inches • 10 cartridges/box.

500/416 NITRO EXPRESS

Most of the classic Nitro Express cartridges are about one hundred years old. The 500/416 NE only goes back a few years and was developed by Krieghoff who wanted a rimmed round with performance equalling that of the 416 Rigby.

The 500/416 NE is a big game cartridge for double rifles using the 500 NE case and the classic 416 caliber bullet.

SOFT NOSE 29,2 G/450 GR — SD 0.371
CARTRIDGE NO. 20 11062 2 — BC 0.338

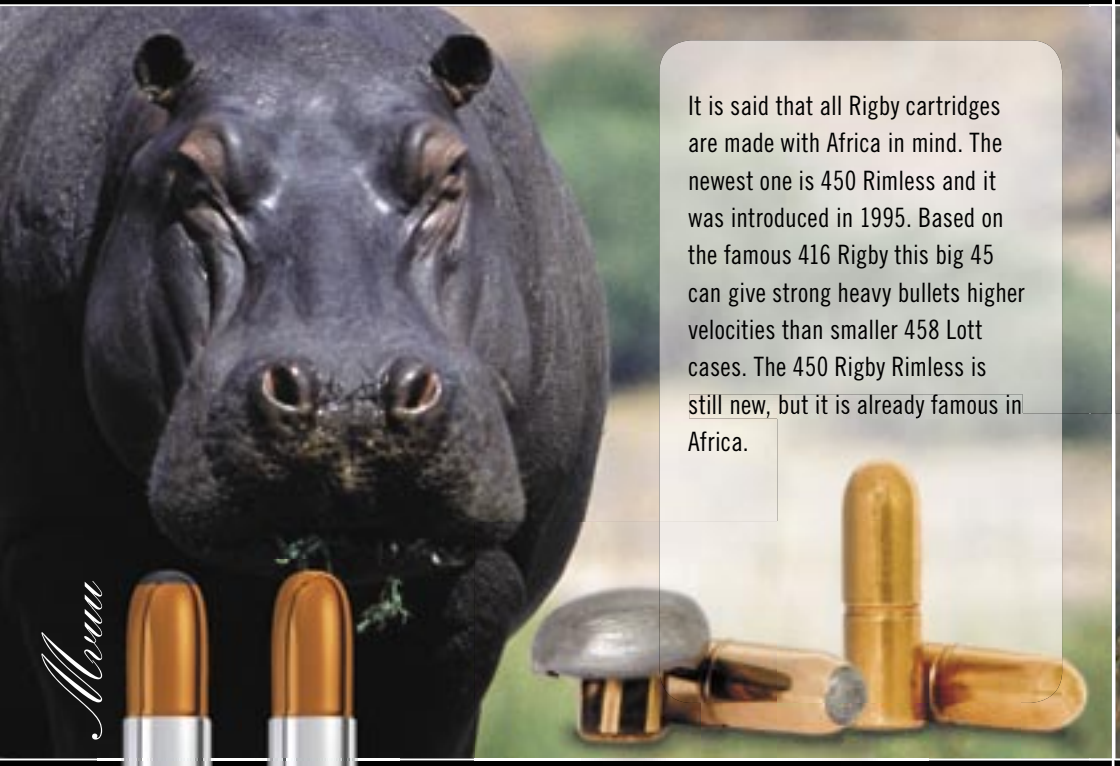
Distance, yards	0	50	100	150	200
Velocity, fps	2100	1991	1886	1785	1688
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.2
Energy, ft-lb	4408	3963	3556	3185	2849
Momentum, lb-f/s	135	128	121	115	109

FULL METAL JACKET 29,2 G/450 GR — SD 0.371
CARTRIDGE NO. 20 11061 2 — BC 0.325

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1987	1878	1773	1673
Trajectory, inches	-1.6	0.3	⊕	-2.8	-8.3
Energy, ft-lb	4408	3946	3525	3143	2798
Momentum, lb-f/s	135	128	121	114	108

Barrel length 24 inches • 10 cartridges/box.

450 RIGBY RIMLESS



It is said that all Rigby cartridges are made with Africa in mind. The newest one is 450 Rimless and it was introduced in 1995. Based on the famous 416 Rigby this big 45 can give strong heavy bullets higher velocities than smaller 458 Lott cases. The 450 Rigby Rimless is still new, but it is already famous in Africa.

SOFT NOSE 35,6 G/550 GR — SD 0.375
CARTRIDGE NO. 20 11105 2 — BC 0.340

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1992	1887	1787	1690
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.2
Energy, ft-lb	5387	4847	4352	3900	3491
Momentum, lb-f/s	165	157	148	140	133

FULL METAL JACKET 35,6 G/550 GR — SD 0.375
CARTRIDGE NO. 20 11106 2 — BC 0.326

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1987	1879	1774	1674
Trajectory, inches	-1.6	0.3	⊕	-2.8	-8.3
Energy, ft-lb	5387	4825	4311	3845	3425
Momentum, lb-f/s	165	156	148	139	132

Barrel length 24 inches • 10 cartridges/box.

458 LOTT

The 458 Lott was introduced by Jack Lott in 1971. After having been injured by a buffalo in Mozambique, Lott wanted more than a 458 Winchester Magnum. To improve the 458 WM the Lott-case was made 3/10 inch longer for more case capacity. 458 WM cartridges can be used in firearms chambered for 458 Lott, and 458 Lott is the favorite cartridge used in the rifles of many African Professional Hunters.

SOFT NOSE 32,4 G/500 GR — SD 0.341
CARTRIDGE NO. 20 11115 2 — BC 0.310

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1982	1868	1758	1654
Trajectory, inches	-1.6	0.3	⊕	-2.8	-8.4
Energy, ft-lb	4897	4361	3874	3434	3039
Momentum, lb-f/s	150	142	133	126	118

FULL METAL JACKET 32,4 G/500 GR — SD 0.341
CARTRIDGE NO. 20 11116 2 — BC 0.310

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1982	1868	1758	1654
Trajectory, inches	-1.6	0.3	⊕	-2.8	-8.4
Energy, ft-lb	4897	4361	3874	3434	3039
Momentum, lb-f/s	150	142	133	126	118

Barrel length 24 inches • 10 cartridges/box.

470 NITRO EXPRESS

Introduced in 1900 it became popular after 1907 with the banning of 45 caliber cartridges in India and Sudan. 470 NE is the most popular cartridge for new double rifles for Big Game hunting in Africa, and in modern loadings, the classic 470 NE is better than ever.

SOFT NOSE 32,4 G/500 GR — SD 0.318
CARTRIDGE NO. 20 11205 2 — BC 0.374

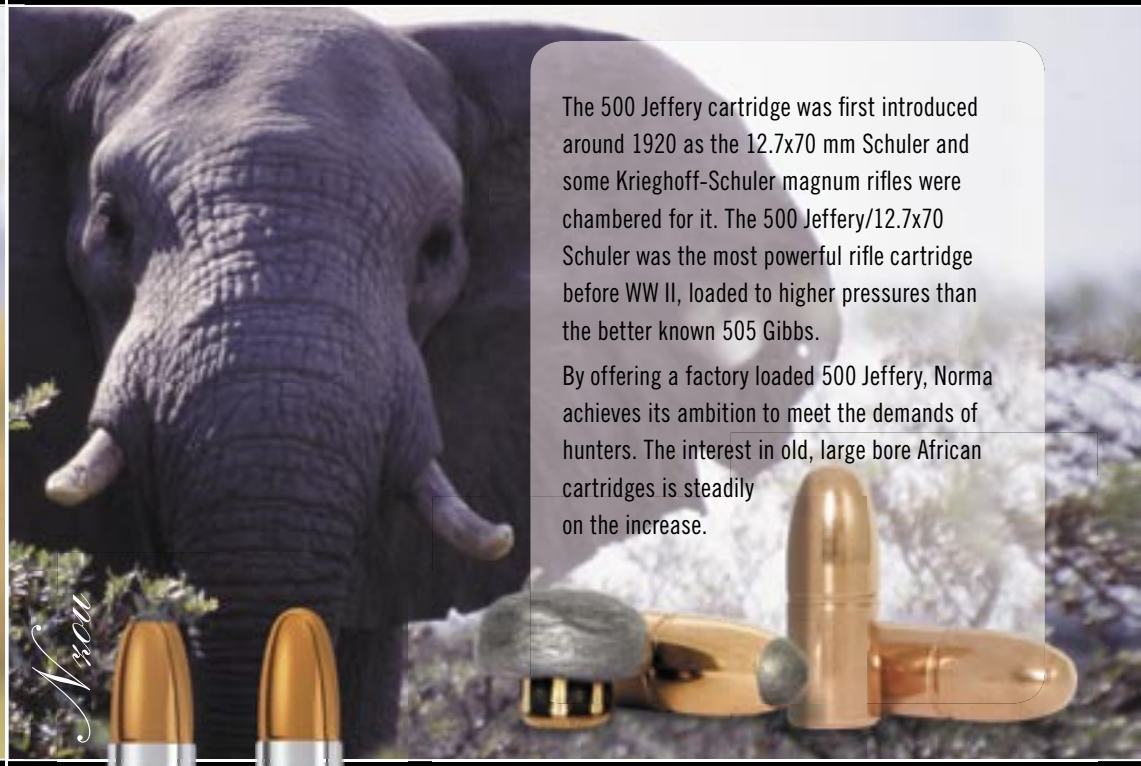
Distance, yards	0	50	100	150	200
Velocity, fps	2100	2002	1906	1814	1725
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.0
Energy, ft-lb	4897	4449	4035	3654	3304
Momentum, lb-f/s	150	143	136	130	123

FULL METAL JACKET 32,4 G/500 GR — SD 0.318
CARTRIDGE NO. 20 11206 2 — BC 0.370

Distance, yards	0	50	100	150	200
Velocity, fps	2100	2001	1904	1811	1721
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.0
Energy, ft-lb	4897	4445	4027	3642	3290
Momentum, lb-f/s	150	143	136	129	123

Barrel length 24 inches • 10 cartridges/box.

500 JEFFERY



The 500 Jeffery cartridge was first introduced around 1920 as the 12.7x70 mm Schuler and some Krieghoff-Schuler magnum rifles were chambered for it. The 500 Jeffery/12.7x70 Schuler was the most powerful rifle cartridge before WW II, loaded to higher pressures than the better known 505 Gibbs.

By offering a factory loaded 500 Jeffery, Norma achieves its ambition to meet the demands of hunters. The interest in old, large bore African cartridges is steadily on the increase.

SOFT NOSE 36,9 G/570 GR — SD 0.313
CARTRIDGE NO. 20 11316 2 — BC 0.368

Distance, yards	0	50	100	150	200
Velocity, fps	2200	2097	1997	1901	1807
Trajectory, inches	-1.6	0.2	⊕	-2.4	-7.1
Energy, ft-lb	6127	5568	5050	4573	4134
Momentum, lb-f/s	179	171	163	155	147

FULL METAL JACKET 36,9 G/570 GR — SD 0.313
CARTRIDGE NO. 20 11315 2 — BC 0.350

Distance, yards	0	50	100	150	200
Velocity, fps	2200	2092	1987	1886	1788
Trajectory, inches	-1.6	0.2	⊕	-2.4	-7.2
Energy, ft-lb	6127	5541	4999	4502	4048
Momentum, lb-f/s	179	170	162	154	146

Barrel length 24 inches • 10 cartridges/box.

500 NITRO EXPRESS 3”

The 500 Nitro Express 3” was developed from black powder cartridges, and the first smokeless 500 came in the 1890s. The big 500 NE-Double became a favorite among elephant hunters, and is now seeing a second spring. More and more double rifles in 500 NE are being built and the old classic with new bullets will hunt in Africa again.

SOFT NOSE 36,9 G/570 GR — SD 0.313
CARTRIDGE NO. 20 11301 2 — BC 0.368

Distance, yards	0	50	100	150	200
Velocity, fps	2100	2000	1903	1809	1719
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.0
Energy, ft-lb	5583	5064	4585	4145	3742
Momentum, lb-f/s	171	163	155	147	140

FULL METAL JACKET 36,9 G/570 GR — SD 0.313
CARTRIDGE NO. 20 11302 2 — BC 0.350

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1995	1893	1795	1701
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.1
Energy, ft-lb	5583	5039	4538	4081	3664
Momentum, lb-f/s	171	162	154	146	139

Barrel length 24 inches • 10 cartridges/box.

505 MAGNUM GIBBS

Developed by George Gibbs in 1911 the 505 was made famous by Ernest Hemingway’s story: *The short happy life of Francis Macomber.* The big 505 Magnum Gibbs is enough cartridge for all African hunting, and is a formidable performer with modern bullets in a big gun.

PROTECTED POINT 39,0 G/600 GR — SD 0.336
CARTRIDGE NO. 20 11310 2 — BC 0.360

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1998	1899	1803	1711
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.1
Energy, ft-lb	5877	5319	4805	4334	3904
Momentum, lb-f/s	180	171	163	155	147

FULL METAL JACKET 39,0 G/600 GR — SD 0.336
CARTRIDGE NO. 20 11311 2 — BC 0.360

Distance, yards	0	50	100	150	200
Velocity, fps	2100	1998	1899	1803	1711
Trajectory, inches	-1.6	0.3	⊕	-2.7	-8.1
Energy, ft-lb	5877	5319	4805	4334	3904
Momentum, lb-f/s	180	171	163	155	147

Barrel length 24 inches • 10 cartridges/box.

THE AFRICAN PROFESSIONAL HUNTERS

J.A.HUNTER (1887-1963) – known as the first "White Hunter" arrived in Kenya from his native Scotland in 1908. His parents and Ken Stewart's parents came from the same part of Scotland and knew each other well.

J.A., as he came to be known, first joined the Safari outfitters *Leslie & Tarlton* and thereafter spent his entire life as a Professional Hunter in East Africa. He used several rifles in different calibers for his hunting, including 416 Rigby, 500 Nitro Express and 505 Magnum Gibbs.

J.A. served as a mentor for young Ken Stewart when the latter worked for him as a trainee hunter for a few years in the 1950s.

During his career J.A. hunted with personalities like Colonel Sandy McNab and Denys Finch-Hatton, held several world records for Big Game at various times, and lead a group that killed 1000 rhinos in a single year in Kenya. In later years he became concerned about the possible extinction of the wildlife he had so assiduously hunted, and served as a game warden and spoke in favour of conservation.

J.A. also wrote several books: *African Bush Adventures*, *African Hunter*, *Hunter's Tracks* and *White Hunter*, about his safaris before WW2, as well as *Killers of Kilimanjaro*, which was made into a movie in 1959.

KEN RANDALL (†1991) – was Harry Selby's older cousin and they started to hunt elephants together in the northern Frontier Province of Kenya towards the end of WW2. Ken later complemented the hunting operation with game catching as told in the book *The Enormous Zoo* by Colin Willock. The characters in the Hollywood movie *Hatari* were also based on the Randall family of hunters and game catchers. John Wayne played the character of Ken Randall while Red Buttons played Ken Stewart. The Randall family was also involved in several other films, such as *Where No Vultures Fly*, *Mogambo*, *Born Free* and Joy Adamson's *Born Free* TV Series.

KEN RANDALL WITH HIS FIRST LION – RANDALL FARM, NANYUKI DISTRICT, KENYA

KEN WITH HIS FIRST BLACK RHINO – NORTHERN FRONTIER DISTRICT, KENYA 1930

J.A. HUNTER

A YOUNG KEN WITH CROP RAIDING ELEPHANT – MERU DISTRICT, MOUNT KENYA, LATE 1930

HARRY SELBY

DR. KEVIN ROBERTSON – is the author of the run-away best seller on African game animal shot placement, *The Perfect Shot*. He is also a wildlife veterinarian and a licensed Professional Hunter in both Zimbabwe, Moçambique and South Africa.

Ballistics and the study of Terminal Bullet Performance have long been Kevin's fascination and few other PHs have acquired his level of knowledge on the current calibers, cartridges and bullets suitable for all African species.

Through careful observation and numerous game animal dissections, Kevin has come to recognize what works best, ballistically, for most African species. This information, he has now shared with us at Norma and he is actively involved with us in the development of African PH – our new line-up of big bore ammo, especially intended for Africa's biggest and most dangerous. Buffalo are Kevin's favorite species and he has spent more than 20 years both hunting them and studying them in the greatest of detail. His latest buffalo book – *Africa's Most Dangerous* is already being considered the definitive work on these formidable black bovines.

Not only does Kevin still actively hunt dangerous game, he also teaches ballistics, game utilization and wildlife diseases to local university students and he is currently the principal and director of the *Eastern Cape Academy of Professional Hunting*.

DR. KEVIN ROBERTSON

KEVIN ROBERTSON AND CLIENT WITH A NICE BUFFALO BULL SHOT IN DANDE, NORTHERN ZIMBABWE, JULY 2006.

DR. DON HEATH – joined the Zimbabwe National Parks Department on leaving school, eventually rising to the post of Senior Ecologist responsible for safari hunting and quota setting. Of course, being the government officer on the ground meant that rogue elephants and man-eating lions were also his responsibility. Don planned and organised the last big elephant culls (1993) and participated in the buffalo eradication culls, organised by the veterinary department. He has personally dissected more than 2000 elephants within the framework of a bullet testing project. His doctorate focused on the sustainable hunting of four key species by Zimbabwe's hunting industry – elephant, buffalo, sable and impala. He started examining prospective professional hunters in 1996. Since retiring from National Parks in 1998 Don has worked as a freelance professional hunter and a full-time writer, as well as taking over the position of Chief Examiner for the *Zimbabwe Professional Hunters and Guides Association*.

DR. DON HEATH

DON WITH A BUFFALO SHOT BY A PROSPECTIVE PH AT THE ZIMBABWE PROFICIENCY EXAM OCTOBER 2006.

STEN CEDERGREN (1919-2007) – was born in Sweden. As a young man he worked on a cattle ranch in Paraguay. During the Korean War, he joined the US Army and served in the 82nd Airborne Division. In 1955 he began working in Kenya for Tom Carr Hartley, a well known game catcher. The year after, he joined the White Hunters in Nairobi. Sten hunted extensively in East Africa, the Sudan and Botswana. He moved to Zimbabwe in 1977 and farmed coffee there until 1980. He was a professional game hunter in Zimbabwe until his retirement. He passed away in 2007. His widow Lolo lives in Harare.

STEN CEDERGREN

MY BEST ELEPHANT TROPHY, THE "MUTA" ELEPHANT, 120 AND 119 POUNDS – YATTA PLATEAU, KENYA, 1959.

KEN STEWART – was born in 1934 and brought up on a ranch in the Machakos in Kenya. Ken shot his first Thompson's gazelle under his father's guidance at the age of seven, and having John "Pondoro" Taylor as a guest at the farm, Ken's future career was sealed. After having completed his apprenticeship as a PH he started to hunt with J.A. Hunter. Ken Stewart started making corebonded bullets under the name *Stewart Hi Performers* about 20 years ago. Presently he makes limited quantities of custom bullets of different calibers and different weights according to customers' requests.

(stewbullets@mweb.co.za)

KEN STEWART

KEN STEWART AND KEN RANDALL WITH TUSKS OF AN ELEPHANT KEN STEWART SHOT IN THE YATTA DISTRICT, KENYA 1968. THE TUSKS WEIGHED OVER 130 POUNDS EACH.

ANDREW HOLMBERG – was born in Kenya in 1918 and his mother and father were Swedish. Karen Blixen acted as midwife and also became his godmother. Andrew completed his apprenticeship as a PH in 1939 and hunted extensively in East Africa. Andrew left *Ker & Downey* in 1955 and together with Harry Selby formed the *Selby & Holmberg Company.* However the company was disbanded after a few years in operation. After that he started his own Safari Company based in Botswana. Andrew Holmberg was one of the first Professional Hunters to stop hunting from cars, using camels and horses instead.

ANDREW HOLMBERG

ANDREW WITH THE WORLD RECORD BUFFALO BULL HE SHOT IN 1951.

Norma has developed a wide range of bullets for hunting hoofed game, bear, wild boar, and smaller game. The demands on the bullets include performance and limited waste of meat, a clean wound channel, good penetration and consistent performance in extremes of temperature.

NORMA ORYX is known for its rapid and large massive expansion, very high weight retention and its superior performance on all Scandinavian game.

NORMA ORYX
180 GRAINS
FROM MOOSE.

CAL. 308 WIN.

WEIGHT
RETENTION 92%

NORMA ALASKA and **VULKAN** – two classics used by hunters who prefer conventional soft pointed bullets with rapid expansion.

NORMA ALASKA
156 GRAINS
FROM MOOSE.

CAL. 6,5X55.

WEIGHT
RETENTION 83%

NORMA VULKAN
232 GRAINS
FROM MOOSE.

CAL. 9,3X62.

WEIGHT
RETENTION 63%

NOSLER PARTITION with a separating partition which reduces the degree of expansion, resulting in deep penetration.

These bullets are classics and are found in many Scandinavian big game hunters' rifles.

NOSLER PARTITION
180 GRAINS
FROM MOOSE.

CAL. 308 WIN.

WEIGHT
RETENTION 64%

NOSLER ACCUBOND is a modern, bonded bullet with a plastic point. The bullet has a high Ballistic Coefficient and a thick rear jacket for good penetration and high residual weight.

NOSLER ACCUBOND
180 GRAINS
FROM MOOSE.

CAL. 30-06.

WEIGHT
RETENTION 73%

NORTHERN EUROPE

Scandinavian rifle hunting is dominated by hoofed or antlered game and although more for meat than for throphies, cartridges with power and reliability for big game such as moose and bear are needed. But accuracy and little meat waste when hunting red deer, wild reindeer and roe deer is also important.

ORYX – a bonded success!

Bonding involves soldering together the bullet jacket and core to form a uniform structure to prevent separation or fragmentation on impact, even after striking dense bone.

PERFECT EXPANSION

To ensure perfect expansion at all impact velocities, the Oryx has a thin forward jacket with internal splitting zones. The bonding and the thicker rear jacket wall ensures a high residual weight after impact (often over 90%!) and excellent penetration.

With rapid expansion to a large diameter, without fragmentation, Oryx leaves a large wound channel yet destroys little meat. In addition, the high residual weight of the bullet ensures deep penetration and high energy transfer.

Norma Oryx – a reliable hunting bullet in all calibers!

ORYX IS AVAILABLE IN THE FOLLOWING CALIBERS AND BULLET WEIGHTS

222 Rem.	55 grain	7x65 R	156 grain	300 Win. Mag.	200 grain
223 Rem.	55 grain	280 Rem.	156 grain	8x57 JRS	196 grain
22-250 Rem.	55 grain	7x64	156 grain	8x57 JS	196 grain
220 Swift	55 grain	7 mm Rem. M.	156 grain	338 Win. Mag.	230 grain
6XC	100 grain	7,5x55 Swiss	180 grain	358 Norma M.	250 grain
243 Win.	100 grain	308 Win.	180 grain	9,3x57	232 grain
6,5x55	156 grain	30-06	180 grain	9,3x62	232 grain
270 Win.	150 gram	30-06	200 grain	9,3x62	286 grain
270 WSM	150 grain	300 WSM	180 grain	9,3x62	325 grain
7x57 R	156 grain	308 Norma M.	180 grain	9,3x74 R	286 grain
7x57	156 grain	300 Win. Mag.	180 grain	375 H&H Mag.	300 grain

"Bonding" occurs when a bullet's jacket and core are soldered together to add strength and prevent jacket and core separation when hitting heavy bone.

The illustration shows a 30-06 Oryx bullet recovered from a bull moose with a live weight of 350 kg. The bullet has struck ribs and the lungs but still retains 96% of its original weight.

At the tip you can detect the splitting zones and the non-bonded section of the tip.

There is superior adhesion between the jacket and the core. A ground down bullet can easily be twisted 90° without the jacket separating from the core.

Tip non-bonded with splitting zones
Thin forward jacket wall
Bonded jacket and lead core
Lead core
Reinforced jacket wall at base

ORYX

The Oryx holds together even when there is a solid hit on heavy bone, and leaves few fragments in surrounding tissue. This also prevents the bullet from deviating from its course inside the body cavity.

SOFT POINT

A conventional soft point bullet often fragments when bone is hit. In the worst case, there is total fragmentation or the core can separate entirely from the jacket.

Norma cartridges loaded with rapidly expanding Norma Plastic Point or Nosler Ballistic Tip bullets ensure instant knock-down effect. The Norma Vulkan and Soft Point delivers quick, safe and reliable expansion and the Nosler Accubond safe expansion and deep penetration.

NORMA VULKAN is a rapidly expanding hunting bullet which has become very popular in Central Europe.

NORMA VULKAN
232 GRAINS
FROM WILD BOAR.

CAL. 9,3X62.

RETAINED
WEIGHT 78%

NORMA PLASTIC POINT – the bullet for the hunter who prefers immediate expansion and rapid effect.

NORMA PLASTIC POINT
286 GRAINS
FROM WILD BOAR.

CAL. 9,3X62.

RETAINED
WEIGHT 90%

NORMA ORYX is an excellent choice for hunting red deer and wild boar. Perfect expansion and penetration with high residual weights.

NORMA ORYX
156 GRAINS
FROM RED DEER.

CAL. 7 MM REM. MAG.

RETAINED
WEIGHT 96%

NOSLER ACCUBOND gives high accuracy and a flat trajectory.

NOSLER ACCUBOND
180 GRAINS
FROM RED DEER.

CAL. 30-06.

RETAINED
WEIGHT 73%

NORMA SOFT POINT – the bullet for the hunter who prefers immediate expansion and rapid effect.

NORMA SOFT POINT
130 GRAINS FROM
FALLOW DEER.

CAL. 270 WIN.

RETAINED
WEIGHT 76%

NOSLER BALLISTIC TIP – the bullet for the hunter who prefers immediate expansion and rapid effect.

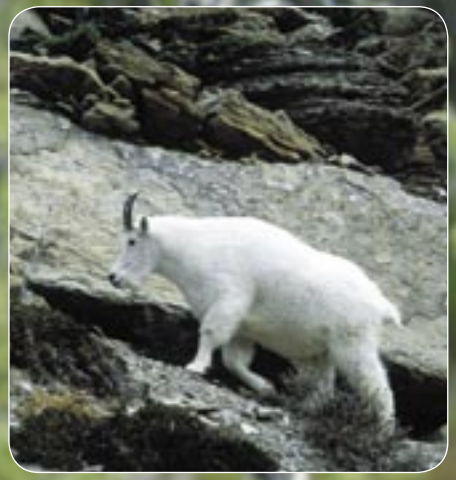
NOSLER BALLISTIC
TIP 140 GRAINS FROM
GAMS/CHAMOIS.

CAL. 7 MM-08 REM.

RETAINED
WEIGHT 49%

CENTRAL & SOUTHERN EUROPE

Continental hunting includes everything from quick shots on running game to well planned shots from atop a shooting platform.



North America offers vast and varied hunting for everything from the smallest varmints to huge moose, elk, and bear. That is why Norma manufactures ammunition with different performance including deep penetration and high residual weight for the toughest game, superior accuracy and rapid expansion for smaller game at long distances.

NORMA ORYX is the perfect choice with rapid expansion to a large diameter mushroom and good penetration. This is an all-round bullet.

NORMA ORYX
250 GRAINS FROM
BEAR.

CAL. 358 NORMA
MAGNUM.

WEIGHT
RETENTION 98%

NOSLER BALLISTIC TIP offers a flat trajectory and high accuracy. Rapid expansion makes Nosler Ballistic Tip suitable for hunting smaller game.

NOSLER BALLISTIC TIP
140 GRAINS FROM
WHITE TAIL DEER.

CAL. 7 MM REM. MAG.

WEIGHT
RETENTION 49%

NOSLER ACCUBOND provides rapid expansion to a large diameter mushroom and with superior accuracy and good penetration.

NOSLER ACCUBOND
180 GRAINS FROM
MULE DEER.

CAL. 30-06.

WEIGHT
RETENTION 61%

BARNES TRIPLE-SHOCK – a hunting bullet with the highest possible residual weight and deepest penetration. This bullet can take on anything.

BARNES TRIPLE-SHOCK
150 GRAINS
FROM ELK.

CAL. 300 WIN. MAG.

WEIGHT RETENTION 100%

SWIFT A-FRAME – bullets with very high residual weight and deep penetration.

SWIFT A-FRAME
165 GRAINS
FROM ELK.

CAL. 308 WIN.

WEIGHT
RETENTION 98%

NOSLER PARTITION – the classic big game bullet. The first bullet with a partition to halt expansion.

NOSLER PARTITION
140 GRAINS
FROM MULE DEER.

CAL. 6,5X55

WEIGHT
RETENTION 73%

NORTH AMERICA

This vast continent offers exciting hunting – from large bear and moose in Alaska to smaller game in the mountains or on the prairie.

Hunting antelope in Africa can take place under the most varied conditions and distances. A reliable bullet can secure your trophy when the hunting gets tough!

Tough game requires perfect accuracy and deep penetration!

Antelope, such as Oryx, Wildebeest, Hartebeest and Eland are notorious for being tough game. Together with the Zebra, these really need a well placed bullet.

Modern bullets with high residual weight and penetration are recommended.

NORMA ORYX for rapid expansion to a large diameter and good penetration is a good all-round bullet for antelope.

NORMA ORYX
180 GRAINS FROM GEMSBOK/ORYX.

CAL. 308 NORMA MAG.

WEIGHT
RETENTION 94%

NOSLER ACCUBOND for rapid expansion, high accuracy and good penetration.

NOSLER ACCUBOND
180 GRAINS
FROM WILDBEEST.

CAL. 30-06.

WEIGHT
RETENTION 61%

NORMA ORYX in bigger calibers still offers rapid expansion to a larger diameter and good penetration.

NORMA ORYX
300 GRAINS
FROM ELAND.

CAL. 375 H&H MAG.

WEIGHT
RETENTION 96%

SWIFT A-FRAME – bonded front core in the A-Frame jacket for reliable expansion, high residual weight an deep penetration.

SWIFT A-FRAME
180 GRAINS
FROM WILDBEEST.

CAL. 300 WIN. MAG.

WEIGHT
RETENTION 95%

NOSLER PARTITION the classic big game bullet with an expansion barrier.

NOSLER PARTITION
180 GRAINS
FROM HARTEBEEST.

CAL. 308 WIN.

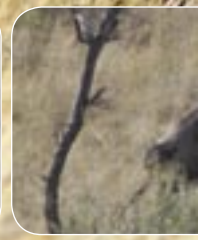
WEIGHT
RETENTION 64%

BARNES TRIPLE-SHOCK is a solid, expanding bullet giving retained weights close to 100%.

BARNES TRIPLE-SHOCK
150 GRAINS FROM ELAND.

CAL. 300 WIN. MAG.

WEIGHT
RETENTION 100%



A WILDEBEEST SHOT WITH A 156 GRAINS NORMA ORYX BULLET IN CALIBER 6.5X55. THE ORYX BULLET GIVES A CLEAR AND IMMEDIATE EFFECT.

AFRICAN PLAINS GAME

Africa! The ultimate land of hunting, with dense bush, savannahs and open plains. With many kinds of antelope, from the smallest Duikers to Oryx and Eland. There is more to Africa than the Big Five.

CHOOSE THE RIGHT HUNTING BULLET

Conventional Soft Point or a modern, bonded bullet?

Norma offers everything from the quick expanding Plastic and Soft Points to a large selection of Oryx, Vulkan and Alaska bullets.

Choose the bullet that best suits your hunting conditions and the game you are hunting.

The versatile big game hunter can choose between Norma cartridges loaded with Norma's own bullets or Norma cartridges loaded with other modern big game bullets. These you can find on pages 32-33.

NORMA ORYX

Oryx means good accuracy, massive expansion and high residual weight. This bonded design suits the all-round hunter who wishes to simplify the choice of cartridge for hunting. Oryx is available in most calibers, from 222 Rem. to 375 H&H Magnum. Thanks to its excellent performance, in a very few years Oryx has become the most popular of the Norma bullets.

CALIBERS:

- 222 Rem.
- 223 Rem.
- 220 Swift
- 22-250 Rem.
- 6XC
- 243 Win.
- 6,5x55
- 270 Win.
- 270 WSM
- 7x57 R
- 7x57
- 280 Rem.
- 7x65 R
- 7x64
- 7 mm Rem. Mag.
- 7,5x55 Swiss
- 308 Win.
- 30-06
- 300 WSM
- 300 Win. Mag.
- 308 Norma Mag.
- 8x57 JRS
- 8x57 JS
- 338 Win. Mag.
- 358 Norma Mag.
- 9,3x57
- 9,3x62
- 9,3x74 R
- 375 H&H Mag.

NORMA VULKAN

The Vulkan is a classic hunting bullet with a thin front jacket to give rapid expansion and high energy transfer.

The jacket is folded at the tip to protect the lead core against recoil damage in the magazine. This is a very popular bullet for wild boar and red deer hunting.

CALIBERS:

- 6,5x55
- 270 Win.
- 270 WSM
- 7x65 R
- 280 Rem.
- 7x64
- 7 mm Rem. Mag.
- 308 Win.
- 30-06
- 8x57 JRS
- 8x57 JS
- 9,3x62
- 9,3x74 R

NORMA ALASKA

The “Alaska” is a classic among Scandinavian moose hunters and is loaded in most common “moose” calibers.

This is a well proven Soft Point bullet with a soft gilding metal jacket which gives rapid and massive expansion.

CALIBERS:

6,5 Jap.
6,5 Carcano
6,5x55
7,62 Russian
308 Win.
30-06
8x57 JRS
8x57 JS
9,3x57
9,3x62
9,3x74 R

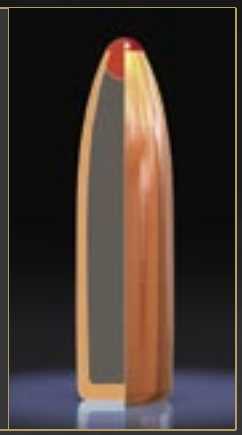
NORMA PLASTIC POINT

The Plastic Point is effective and popular, especially among continental hunters. It is highly accurate, with ultra rapid expansion and at the target ensures the desired result.

The Plastic Point protects the bullet from recoil battering in the magazine and guarantees problem free function in semi-automatics.

CALIBERS:

7x65 R
280 Rem.
7x64
7 mm Rem. Mag.
308 Win.
30-06
300 Win. Mag.
9,3x62
9,3x74 R

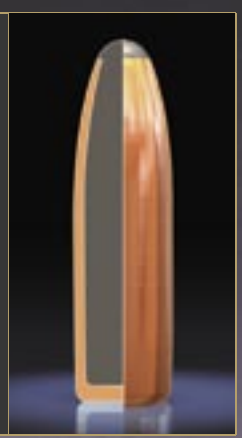


NORMA SOFT POINT

The Norma Soft Point is a conventional lead tipped bullet for hunting smaller game where rapid and effective expansion is more important than high weight retention and penetration.

CALIBERS:

222 Rem.
223 Rem.
22-250 Rem.
220 Swift
5,6x52 R
243 Win.
270 Win.
7,7 Jap.
7,65 Arg.



OTHER HUNTING BULLETS

Norma loads hunting cartridges using bullets made by the largest and best known manufacturers in the industry. In our range, there are cartridges for all types of hunting and among this vast selection, hunters can find their own favourite cartridge and bullet.

Norma Full Metal Jacket

Norma manufactures FMJ bullets in most popular calibers. Their excellent accuracy makes them suitable both for competition, training and small game hunting. Norma FMJ is Scandinavia's favourite cartridge for bird hunting with rifles.

222 Rem.	7x65 R	8x57 JS
22-250 Rem.	7 mm Rem. Mag.	338 Win. Mag.
243 Win.	308 Win.	9,3x57
6,5x55	30-06	9,3x62
270 Win.	300 WSM	
7x57 R	300 Win. Mag.	
270 WSM	8x57 JRS	

Swift Scirocco

High BC, quick expansion and tough, suitable for high velocity cartridges.

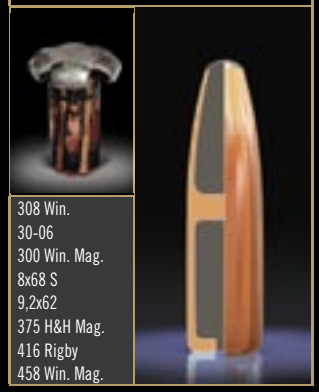
The bonded, thick jacket assures massive expansion and high weight retention.

7 mm Rem. Mag.

Swift A-Frame

This is one of the most used and reliable big game bullets. A classic!

The bonded front jacket and the A-Frame intermediate wall ensure high weight retention and deep penetration.



308 Win.
30-06
300 Win. Mag.
8x68 S
9,2x62
375 H&H Mag.
416 Rigby
458 Win. Mag.

Barnes Triple-Shock

This is the newest among homogenius expanding big game bullets. Triple-Shock combines ballistic shape with reliable expansion and is the most durable of all expanding bullets on the market.

The bullet can withstand both high velocity and thick bone. That makes it a favourite among Big Game hunters.

270 WSM
7 mm Rem. Mag.
300 Win. Mag.
300 WSM
375 H&H Mag.

Barnes Banded Solid

A solid bullet in the true sense of the word. Solid metal throughout.

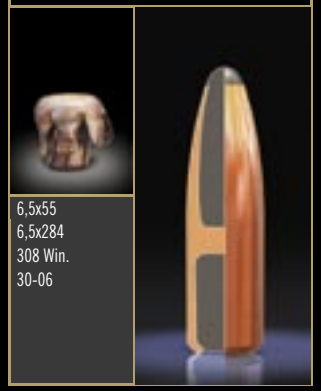
Barnes Banded Solid is designed for maximum penetration in pachyderms.

375 H&H Mag.
416 Rigby
458 Win. Mag.

Nosler Partition

A classic big game bullet! Nosler Partition was the first big game bullet with complete and totally controlled expansion!

The partition ensures both high residual weight and deep penetration.



6,5x55
6,5x284
308 Win.
30-06

Nosler Ballistic Tip

Accuracy and expansion are the characteristics of this hunting bullet. The Ballistic Tip was developed for hunting smaller game at extended ranges.

6x70 R
6XC
6,5x55
270 WSM
7 mm-08 Rem.
308 Win.
30-06
300 WSM
300 Win. Mag.

Nosler Accubond

Nosler Accubond is the new big game bullet from Nosler. It has high BC, match accuracy to assure even and good expansion, high weight retention and deep penetration on all game, regardless of distance.

7x64
30-06
300 Win. Mag.

Woodleigh Soft Point

A classic big game bullet with good expansion and penetration.

The Woodleigh SP is loaded in classic big game cartridges and designed for perfect regulation of double rifles.

375 H&H Mag.
375 Flanged M. NE
404 Jeffery NE
416 Rem. Mag.
416 Rigby
500/416 NE
450 Rigby Rimless
458 Lott
470 NE
500 Jeffery
500 NE 3"
505 Mag. Gibbs

Woodleigh FMJ

This Full Metal Jacket with a thick, steel reinforced jacket is known for its deep, straight penetration.

It has proven its reliability on Africa's Big Five for decades and is therefore the first choice of many PHs when hunting buffalo and elephant.

375 H&H Mag.
375 Flanged M. NE
404 Jeffery NE
416 Rem. Mag.
416 Rigby
500/416 NE
450 Rigby Rimless
458 Lott
470 NE
500 Jeffery
500 NE 3"
505 Mag. Gibbs

New products*

Cartridges:	Bullet weight:
222 Rem.	Oryx 3,6 g/55 gr
223 Rem.	Oryx 3,6 g/55 gr
22-250 Rem.	Oryx 3,6 g/55 gr
220 Swift	Oryx 3,6 g/55 gr
6XC	Nosler BST 6,2 g/95 gr
6XC	Oryx 6,5 g/100 gr
6XC	Coated hollow point 6,8 g/105 gr
270 Win.	Vulkan 10,1 g/156 gr
270 WSM	Vulkan 10,1 g/156 gr
8x68 S	Swift A-Frame 13,0 g/200 gr
9,3x62	Oryx 21,1 g/325 gr
375 H&H Magnum	Barnes Triple-Shock 17,5 g/270 gr
375 H&H Magnum	Swift A-Frame 19,4 g/300 gr
375 Flanged Mag. NE	Woodleigh Soft Nose 22,7 g/350 gr
375 Flanged Mag. NE	Woodleigh FMJ 22,7 g/350 gr
500/416 NE	Woodleigh Soft Nose 29,2 g/450 gr
500/416 NE	Woodleigh FMJ 29,2 g/450 gr
500 Jeffery	Woodleigh Soft Nose 36,9 g/570 gr
500 Jeffery	Woodleigh FMJ 36,9 g/570 gr

Bullets:	Bullet weight:
5,7 mm (.224")	Oryx 3,6 g/55 gr
270 (.270")	Vulkan 10,1 g/156 gr
9,3 (.366")	Oryx 21,1 g/325 gr
375 (.375")	Barnes Banded Solid 19,4 g/300 gr
416 (.416")	Barnes Banded Solid 25,9 g/400 gr
458 (.458")	Barnes Banded Solid 32,4 g/500 gr

Cases:
204 Ruger
6XC
260 Rem.
300 SAUM
300 H&H Magnum
35 Whelen
375 Wby. Magnum
45-120

*) To be introduced in 2008.

Planned products

Cartridge:	Bullet weight:
243 Win. JM	FMJ 5,8 g/90 gr
35 Whelen	Oryx 16,2 g/250 gr
358 Norma Magnum	FMJ 14,9 g/230 gr

Bullets:	Bullet weight:
358 (.358")	FMJ 14,9 g/230 gr

Cases:
300 Norma Magnum
338 Norma Magnum
375 Norma Magnum
45-70

PRODUCT DEVELOPMENT AT NORMA

The pace of product development at Norma is now quicker than ever before. Many bullets, cases and cartridges have been developed lately and further products are being planned or researched (some exclusively for our Private Label customers) – see the table on the left.

For more information about launch dates, please visit www.norma.cc.

ProHuntF34

The only hunting radio on
the market with Wisper Mode and
Scrambler function.
Now with a 5 year guarantee.

ICOM

www.icom.nu

Nils Kvale – ”Mr. Norma Magnum”

Nils Kvale was asked to join Norma at Åmotfors in 1952 by the then Managing Director Amund Enger. His task, as head of the Ballistics Department, was to develop a civilian ammunition program, as replacement for the diminishing production of military ammunition.

NILS KVALE (1922-1988)

Earlier, Kvale had developed a round of his own, the 8 mm Kvale, better known as the “Poor Man’s Magnum”. At this time, in the USA, there was an abundance of European Mauser m/98 rifles in cal. 8x57 JS and the “Magnum Fever” was rampant.

In 1953, Roy Weatherby approached Norma to have his special wildcat cases produced at Åmotfors, with the result that Norma started to load ammunition in all the Weatherby calibers.

The well known firearms expert, Philip B. Sharpe, visited Norma in 1954 with a proposal for a 7 mm wildcat. This visit resulted in Norma’s first magnum cartridge, the 7x61 Sharpe & Hart Super.

Nils Kvale used his magnum cartridge experience to develop Norma’s own magnums, an important part of the marketing strategy in the USA. Hunters in that part of the world had caught the Magnum Fever and after the introduction of the 458 Winchester Magnum in 1956, “Magnum” was all that mattered. The 358 Norma Magnum, introduced in 1959, with a case length equivalent to the 30-06, gave approximately the same performance as the older 375 Holland & Holland Magnum.

The firearms manufacturer Schultz & Larsen produced the famous “Norma Rifle” in 358 Norma Magnum and in 1960, also in 308 Norma Magnum.

300 NORMA MAG.

308 NORMA MAG.

338 NORMA MAG.

358 NORMA MAG.

VISIONS FOR THE FUTURE – THE NORMA FAMILY IS GROWING

375 NORMA MAG.

> Given a better timing and better luck, the 358 Norma Magnum could have been one of the greatest calibers of all times!
>
> Quote from an American hunting magazine from the beginning of the 1990's

The 358 Norma Magnum was the first magnum cartridge to carry the Norma name. It was introduced in 1959 in conjunction with Norma's massive marketing effort in the USA while the Magnum Fever ran rampant among hunters.

358 Norma Magnum is a Norma "Short Magnum" from the 1960's, with as large a case volume as the 375 H&H Magnum. Its high striking energy makes it one of the foremost big game calibers especially for Scandinavian game, such as moose and bear, but also for large antelope in the African bush.

308 Norma Magnum, introduced in 1960, is very popular, both for hunting and long distance competition shooting. The 308 NM is one of the best balanced magnum cartridges in the 30 caliber range, with accuracy, trajectory and performance suitable for most big game hunting.

NEW NORMA MAGNUMS

In all probability, we will continue extending the Norma family with three new calibers: 300, 338 and 375 Norma Magnum.

The latest trend in big game cartridges is short, fat, belt-less magnum cases. The new Norma Magnums will be based on the 416 Rigby but with a longer case than most of the new American "Short Magnums". As a consequence, the new Norma Magnums will have higher velocities and energy than the American competitors, but still fit normal length actions.

BALLISTIC DATA – HUNTING AMMUNITION

Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
222 REM.																		
SOFT POINT										50	⊕	0,6	0,0	-2,1	-12,1			
3,2 g/50 gr	0.185	3199	2679	2215	1800	1136	797	545	360	100	-0,3	⊕	-0,9	-3,3	-13,8	1,5	6,7	16,7
# 20**15711**2										150	0,0	0,6	⊕	-2,1	-12,0			
										200	0,5	1,6	1,6	⊕	-8,9			
FULL JACKET										50	⊕	0,3	-1,0	-4,3	-18,2			
3,2 g/50 gr	0.198	2789	2344	1942	1587	864	610	419	280	100	-0,1	⊕	-1,5	-4,8	-19,0	1,7	7,6	18,7
# 20**15713**2										150	0,4	1,0	⊕	-2,8	-16,1			
										200	1,1	2,4	2,2	⊕	-11,8			
ORYX*										50	⊕	0,5	-0,4	-2,9	-14,2			
3,6 g/55 gr	0.185	3051	2549	2099	1700	1137	794	538	353	100	-0,2	⊕	-1,1	-3,8	-15,7	1,6	7,2	17,8
# 20**15704**2										150	0,1	0,7	⊕	-2,4	-13,5			
										200	0,7	1,9	1,8	⊕	-9,9			
SOFT POINT										50	⊕	0,4	-0,7	-3,4	-15,4			
4,0 g/62 gr	0.214	2887	2464	2078	1731	1148	836	595	413	100	-0,2	⊕	-1,2	-4,2	-16,5	1,5	6,6	16,1
# 20**15716**2										150	0,2	0,8	⊕	-2,5	-14,0			
										200	0,9	2,1	1,9	⊕	-10,3			
223 REM.																		
SOFT POINT										50	⊕	0,5	-0,1	-1,9	-10,3			
3,6 g/55 gr	0.235	3215	2800	2420	2072	1263	957	716	524	100	-0,3	⊕	-0,8	-3,0	-11,9	1,2	5,1	12,2
# 20**15717**2										150	0,0	0,6	⊕	-1,8	-10,2			
										200	0,5	1,5	1,4	⊕	-7,5			
ORYX*										50	⊕	0,5	-0,2	-2,5	-13,2			
3,6 g/55 gr	0.185	3117	2608	2152	1746	1187	831	566	372	100	-0,3	⊕	-1,0	-3,6	-14,8	1,6	6,9	17,3
# 20**15719**2										150	0,1	0,7	⊕	-2,2	-12,8			
										200	0,6	1,8	1,7	⊕	-9,4			
22-250 REM.																		
SOFT POINT										50	⊕	0,9	0,9	0,0	-5,2			
3,4 g/53 gr	0.237	3707	3246	2830	2451	1618	1240	943	707	100	-0,4	⊕	-0,4	-1,7	-7,8	1,0	4,2	10,0
# 20**15733**2										150	-0,3	0,3	⊕	-1,2	-7,0			
										200	0,0	0,9	0,9	⊕	-5,2			
ORYX*										50	⊕	0,8	0,7	-0,6	-7,4			
3,6 g/55 gr	0.185	3609	3041	2540	2091	1591	1130	788	534	100	-0,4	⊕	-0,5	-2,2	-9,9	1,3	5,7	14,0
# 20**15734**2										150	-0,2	0,4	⊕	-1,5	-8,8			
										200	0,2	1,1	1,1	⊕	-6,6			
220 SWIFT																		
SOFT POINT										50	⊕	1,0	1,2	0,5	-4,3			
3.2 g/50 gr	0.185	4019	3394	2852	2369	1794	1279	903	623	100	-0,5	⊕	-0,3	-1,5	-7,2	1,2	5,0	12,2
# 20**15701**2										150	-0,4	0,2	⊕	-1,1	-6,7			
										200	-0,1	0,7	0,8	⊕	-5,1			
ORYX*										50	⊕	0,9	0,9	-0,1	-6,1			
3,6 g/55 gr	0.185	3773	3184	2667	2205	1739	1238	869	594	100	-0,4	⊕	-0,4	-1,9	-8,7	1,3	5,4	13,2
# 20**15703**2										150	-0,3	0,3	⊕	-1,3	-7,8			
										200	0,0	0,9	1,0	⊕	-5,9			
5,6X52 R																		
SOFT POINT										50	⊕	0,3	-0,8	-3,5	-15,0			
4,6 g/71 gr	0.268	2789	2456	2146	1860	1227	951	726	546	100	-0,2	⊕	-1,3	-4,2	-16,0	1,3	5,3	12,8
# 20**15604**2										150	0,3	0,9	⊕	-2,5	-13,5			
										200	0,9	2,1	1,9	⊕	-9,7			
6X70 R																		
NOSLER BST										50	⊕	0,0	-1,9	-5,7	-20,2			
5,8 g/90 gr	0.365	2428	2200	1985	1783	1178	968	788	635	100	0,0	⊕	-1,8	-5,6	-20,1	1,1	4,6	11,0
# 20**16011**2										150	0,6	1,2	⊕	-3,2	-16,5			
										200	1,4	2,8	2,4	⊕	-11,7			

*) Preliminary Data

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Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
6XC																		
NOSLER BST*										50	⊕	0,5	-0,2	-2,1	-10,5			
6,2 g/95 gr	0.379	2953	2704	2469	2245	1840	1543	1286	1064	100	-0,3	⊕	-0,9	-3,2	-12,1	0,8	3,4	7,9
# 20**16021**2										150	0,1	0,6	⊕	-1,9	-10,2			
										200	0,5	1,6	1,4	⊕	-7,3			
ORYX*										50	⊕	0,5	-0,4	-2,7	-12,7			
6,5 g/100 gr	0.257	2953	2594	2262	1955	1937	1494	1136	849	100	-0,2	⊕	-1,1	-3,6	-14,1	1,2	5,1	12,4
# 20**16022**2										150	0,1	0,7	⊕	-2,2	-11,9			
										200	0,7	1,8	1,6	⊕	-8,7			
243 WIN.																		
FULL JACKET										50	⊕	0,6	0,0	-1,8	-10,3			
5,2 g/80 gr	0.262	3117	2750	2412	2098	1726	1344	1034	782	100	-0,3	⊕	-0,9	-3,0	-12,1	1,1	4,7	11,2
# 20**16007**2										150	0,0	0,6	⊕	-1,9	-10,3			
										200	0,5	1,5	1,4	⊕	-7,5			
SOFT POINT										50	⊕	0,5	-0,3	-2,5	-12,2			
6,5 g/100 gr	0.257	2986	2624	2290	1981	1980	1529	1165	871	100	-0,3	⊕	-1,0	-3,5	-13,6	1,2	5,0	12,2
# 20**16003**2										150	0,1	0,7	⊕	-2,1	-11,6			
										200	0,6	1,7	1,6	⊕	-8,4			
ORYX										50	⊕	0,4	-0,5	-3,0	-13,7			
6,5 g/100 gr	0.257	2887	2533	2205	1903	1851	1425	1080	804	100	-0,2	⊕	-1,2	-3,9	-14,9	1,2	5,3	12,8
# 20**16008**2										150	0,2	0,8	⊕	-2,3	-12,6			
										200	0,8	1,9	1,7	⊕	-9,1			
6,5 JAP.																		
ALASKA										50	⊕	-0,7	-4,0	-10,2	-32,9			
10,1 g/156 gr	0.326	2067	1835	1622	1431	1480	1167	911	710	100	0,4	⊕	-2,9	-8,8	-30,8	1,6	6,6	15,8
# 20**16532**2										150	1,3	2,0	⊕	-4,9	-25,0			
										200	2,5	4,4	3,7	⊕	-17,7			
6,5 CARC.																		
ALASKA										50	⊕	-0,2	-2,4	-6,8	-23,7			
10,1 g/156 gr	0.326	2330	2082	1849	1636	1881	1501	1185	927	100	0,1	⊕	-2,1	-6,5	-23,1	1,3	5,6	13,3
# 20**16535**2										150	0,8	1,4	⊕	-3,7	-18,9			
										200	1,7	3,2	2,7	⊕	-13,5			
6,5X55																		
NOSLER BST										50	⊕	0,4	-0,4	-2,7	-11,8			
7,8 g/120 gr	0.430	2822	2609	2407	2213	2123	1815	1544	1305	100	-0,2	⊕	-1,1	-3,5	-13,0	0,8	3,1	7,3
# 20**16522**2										150	0,2	0,7	⊕	-2,1	-10,9			
										200	0,7	1,8	1,6	⊕	-7,8			
NOSLER PARTITION										50	⊕	0,3	-0,8	-3,4	-13,5			
9,1 g/140 gr	0.467	2690	2500	2317	2142	2250	1943	1669	1427	100	-0,2	⊕	-1,2	-4,0	-14,4	0,7	3,1	7,1
# 20**16559**2										150	0,3	0,8	⊕	-2,3	-12,0			
										200	0,8	2,0	1,7	⊕	-8,5			
ALASKA										50	⊕	0,1	-1,5	-5,1	-19,4			
10,1 g/156 gr	0.276	2559	2250	1964	1701	2269	1755	1336	1002	100	-0,1	⊕	-1,7	-5,3	-19,7	1,4	5,9	14,1
# 20**16552**2										150	0,5	1,1	⊕	3,1	-16,4			
										200	1,3	2,7	2,3	⊕	-11,7			
ORYX										50	⊕	0,1	-1,4	-4,7	-17,5			
10,1 g/156 gr	0.348	2559	2313	2081	1862	2267	1852	1499	1201	100	-0,1	⊕	-1,6	-4,9	-17,9	1,1	4,5	10,7
# 20**16562**2										150	0,5	1,0	⊕	-2,8	-14,8			
										200	1,2	2,5	2,1	⊕	-10,5			
VULKAN										50	⊕	1,1	-1,3	-4,6	-17,4			
10,1 g/156 gr	0.354	2560	2318	2090	1875	2271	1862	1513	1218	100	-0,1	⊕	-1,6	-4,9	-17,8	1,1	4,4	10,5
# 20**16556**2										150	0,5	1,0	⊕	-2,8	-14,7			
										200	1,2	2,5	2,1	⊕	-10,4			
6,5-284 NORMA																		
NOSLER PARTITION										50	⊕	0,5	-0,1	-1,9	-9,7			
9,1 g/140 gr	0.465	2953	2750	2557	2371	2712	2352	2032	1748	100	-0,3	⊕	-0,9	-3,0	-11,3	0,7	2,7	6,3
# 20**16565**2										150	0,0	0,6	⊕	-1,8	-9,6			
										200	0,5	1,5	1,4	⊕	-6,8			

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Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
270 WIN.																		
SOFT POINT										50	⊕	0,6	0,2	-1,4	-8,5			
8,4 g/130 gr	0.359	3140	2868	2612	2370	2847	2375	1970	1622	100	-0,3	⊕	-0,7	-2,6	-10,4	0,8	3,3	7,7
# 2016902										150	-0,1	0,5	⊕	-1,7	-8,9			
										200	0,3	1,3	1,2	⊕	-6,4			
ORYX										50	⊕	-0,3	-0,6	-3,0	-12,4			
9,7 g/150 gr	0.373	2854	2608	2376	2155	2714	2267	1880	1547	100	-0,2	⊕	-1,1	-3,6	-13,4	0,9	3,6	8,4
# 2016901										150	0,2	0,7	⊕	-2,1	-11,2			
										200	0,7	1,8	1,6	⊕	-8,0			
VULKAN NEW!										50	⊕	0,4	-0,5	-2,8	-12,4			
10,1 g/156 gr	0.340	2854	2586	2333	2094	2822	2317	1886	1520	100	-0,2	⊕	-1,1	-3,6	-13,7	0,9	3,9	9,3
# 2016941										150	0,2	0,7	⊕	-2,2	-11,5			
										200	0,7	1,8	1,6	⊕	-8,2			
270 WSM																		
NOSLER BST										50	⊕	0,6	0,3	-1,0	-7,0			
8,4 g/130 gr	0.433	3281	3047	2825	2614	3108	2681	2305	1973	100	-0,3	⊕	-0,6	-2,3	-8,9	0,6	2,5	5,9
# 2016925										150	-0,1	0,4	⊕	-1,4	-7,6			
										200	0,3	1,1	1,1	⊕	-5,5			
BARNES TRIPLE-SHOCK										50	⊕	0,6	0,1	-1,4	-7,9			
9,1 g/140 gr	0.497	3150	2952	2762	2580	3085	2709	2372	2070	100	-0,3	⊕	-0,7	-2,5	-9,6	0,6	2,3	5,3
# 2016933										150	0,0	0,5	⊕	-1,5	-8,1			
										200	0,3	1,3	1,2	⊕	-5,8			
ORYX										50	⊕	0,5	0,0	-1,7	-9,1			
9,7 g/150 gr	0.373	3117	2856	2611	2378	3237	2718	2271	1884	100	-0,3	⊕	-0,8	-2,8	-10,7	0,8	3,2	7,4
# 2016932										150	0,0	0,5	⊕	-1,7	-9,1			
										200	0,4	1,4	1,3	⊕	-6,5			
VULKAN NEW!										50	⊕	0,6	-0,0	-1,9	-9,9			
10,1 g/156 gr	0.340	3035	2756	2493	2246	3192	2631	2154	1747	100	-0,3	⊕	-0,9	-3,0	-11,6	0,9	3,6	8,5
# 2016935										150	0,0	0,6	⊕	-1,8	-9,9			
										200	0,5	1,5	1,4	⊕	-7,1			
7X57 R																		
FULL JACKET										50	⊕	0,3	-1,0	-3,7	-14,6			
9,7 g/150 gr	0.441	2641	2442	2251	2069	2324	1986	1689	1427	100	-0,1	⊕	-1,3	-4,2	-15,4	0,8	3,3	7,8
# 2017006										150	0,3	0,9	⊕	-2,5	-12,7			
										200	0,9	2,1	1,9	⊕	-9,0			
ORYX										50	⊕	0,2	-1,2	-4,4	-16,9			
10,1 g/156 gr	0.330	2608	2346	2099	1867	2357	1906	1526	1208	100	-0,1	⊕	-1,5	-4,7	-17,4	1,0	4,2	10,0
# 2017003										150	0,4	1,0	⊕	-2,8	-14,4			
										200	1,1	2,4	2,1	⊕	-10,3			
7X57																		
ORYX										50	⊕	0,2	-1,1	-4,2	-16,2			
10,1 g/156 gr	0.330	2641	2377	2128	1894	2417	1957	1569	1243	100	-0,1	⊕	-1,4	-4,6	-16,9	1,0	4,1	9,8
# 2017001										150	0,4	1,0	⊕	-2,7	-14,0			
										200	1,0	2,3	2,0	⊕	-10,0			
7 MM-08 REM.																		
NOSLER BST										50	⊕	0,3	-0,6	-2,9	-11,8			
9,1 g/140 gr	0.485	2822	2633	2452	2278	2476	2156	1870	1614	100	-0,2	⊕	-1,1	-3,5	-12,8	0,7	2,7	6,4
# 2017068										150	0,2	0,7	⊕	-2,1	-10,7			
										200	0,7	1,8	1,6	⊕	-7,6			
7X65 R																		
FULL JACKET										50	⊕	0,3	-0,8	-3,3	-13,2			
9,7 g/150 gr	0.441	2756	2552	2357	2170	2530	2169	1850	1569	100	-0,1	⊕	-1,2	-3,9	-13,9	0,8	3,1	7,3
# 2017064										150	0,3	0,8	⊕	-2,3	-11,6			
										200	0,8	1,9	1,7	⊕	-8,2			
ORYX										50	⊕	0,3	-0,8	-3,6	-14,7			
10,1 g/156 gr	0.330	2723	2454	2200	1962	2569	2086	1678	1334	100	-0,2	⊕	-1,3	-4,2	-15,6	0,9	3,9	9,4
# 2017063										150	0,3	0,9	⊕	-2,5	-13,0			
										200	0,9	2,1	1,9	⊕	-9,3			
PLASTIC POINT										50	⊕	0,2	-1,1	-4,1	-15,8			
11,0 g/170 gr	0.373	2625	2392	2170	1961	2599	2157	1776	1450	100	-0,1	⊕	-1,4	-4,5	-16,4	1,0	4,0	9,5
# 2017028										150	0,4	0,9	⊕	-2,6	-13,6			
										200	1,0	2,3	2,0	⊕	-9,7			
VULKAN										50	⊕	0,2	-1,0	-3,9	-15,5			
11,0 g/170 gr	0.353	2657	2409	2175	1954	2666	2192	1786	1442	100	-0,1	⊕	-1,4	-4,4	-16,2	1,0	4,2	9,9
# 2017029										150	0,3	0,9	⊕	-2,6	-13,5			
										200	1,0	2,2	1,9	⊕	-9,6			

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Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
280 REM.																		
ORYX																		
10,1 g/156 gr	0.330	2789	2516	2259	2017	2695	2193	1768	1410	50	⊕	0,4	-0,7	-3,2	-13,6			
# 20**17048**2										100	-0,2	⊕	-1,2	-3,9	-14,7	0,9	3,8	9,0
										150	0,2	0,8	⊕	-2,3	-12,3			
										200	0,8	2,0	1,7	⊕	-8,8			
VULKAN										50	⊕	0,2	-1,2	-4,4	-16,7			
11,0 g/170 gr	0.353	2592	2348	2117	1900	2537	2081	1692	1362	100	-0,1	⊕	-1,5	-4,7	-17,3	1,0	4,4	10,3
# 20**17051**2										150	0,4	1,0	⊕	-2,7	-14,3			
										200	1,1	2,4	2,1	⊕	-10,2			
PLASTIC POINT										50	⊕	0,3	-0,8	-3,5	-14,3			
11,0 g/170 gr	0.373	2707	2469	2244	2031	2764	2300	1899	1555	100	-0,2	⊕	-1,3	-4,1	-15,2	0,9	3,8	9,1
# 20**17060**2										150	0,3	0,9	⊕	-2,4	-12,6			
										200	0,9	2,1	1,8	⊕	-9,0			
7X64																		
NOSLER ACCUBOND										50	⊕	0,4	-0,3	-2,2	-10,1			
9,1 g/140 gr	0.485	2953	2759	2572	2394	2712	2366	2058	1782	100	-0,2	⊕	-0,9	-3,1	-11,4	0,6	2,6	6,0
# 20**17069**2										150	0,1	0,6	⊕	-1,8	-9,6			
										200	0,6	1,5	1,4	⊕	-6,8			
ORYX										50	⊕	0,4	-1,0	-3,2	-13,6			
10,1 g/156 gr	0.330	2789	2516	2259	2017	2695	2193	1768	1410	100	-0,2	⊕	-1,2	-3,9	-14,7	0,9	3,8	9,0
# 20**17053**2										150	0,2	0,8	⊕	-2,3	-12,3			
										200	0,8	2,0	1,7	⊕	-8,8			
VULKAN										50	⊕	0,3	-0,8	-3,5	-14,3			
11,0 g/170 gr	0.353	2723	2472	2234	2010	2800	2307	1884	1525	100	-0,2	⊕	-1,3	-4,1	-15,2	1,0	4,0	9,6
# 20**17018**2										150	0,3	0,9	⊕	-2,4	-12,7			
										200	0,9	2,1	1,8	⊕	-9,1			
PLASTIC POINT										50	⊕	0,3	-0,8	-3,4	-13,9			
11,0 g/170 gr	0.378	2723	2488	2265	2053	2800	2337	1936	1591	100	-0,2	⊕	-1,3	-4,0	-14,9	0,9	3,8	8,9
# 20**17019**2										150	0,3	0,8	⊕	-2,4	-12,4			
										200	0,9	2,0	1,8	⊕	-8,8			
7 MM REM. MAG.																		
BARNES TRIPLE-SHOCK										50	⊕	0,5	0,1	-1,5	-8,3			
9,1 g/140 gr	0.477	3117	2912	2716	2529	3021	2637	2294	1988	100	-0,3	⊕	-0,8	-2,6	-9,9	0,6	2,4	5,6
# 20**17054**2										150	0,0	0,5	⊕	-1,6	-8,4			
										200	0,4	1,3	1,2	⊕	-6,0			
SWIFT SCIROCCO										50	⊕	0,7	0,4	-1,0	-7,0			
9,7 g/150 gr	0.536	3166	2981	2804	2634	3339	2961	2620	2312	100	-0,3	⊕	-0,6	-2,3	-9,1	0,5	2,1	4,8
# 20**17062**2										150	-0,1	0,4	⊕	-1,5	-7,8			
										200	-0,2	1,2	1,1	⊕	-5,6			
ORYX										50	⊕	0,5	-0,2	-2,3	-11,1			
10,1 g/156 gr	0.330	2953	2670	2404	2153	3021	2470	2002	1607	100	-0,3	⊕	-1,0	-3,3	-12,6	0,8	3,5	8,3
# 20**17047**2										150	0,1	0,6	⊕	-2,0	-10,7			
										200	0,6	1,7	1,5	⊕	-7,7			
VULKAN										50	⊕	0,5	-0,2	-2,2	-10,8			
11,0 g/170 gr	0.353	2953	2688	2438	2201	3293	2728	2244	1830	100	-0,3	⊕	-1,0	-3,2	-12,3	0,9	3,6	5,8
# 20**17024**2										150	0,1	0,6	⊕	-2,0	-10,4			
										200	0,6	1,6	1,5	⊕	-7,5			
PLASTIC POINT										50	⊕	0,5	-0,2	-2,1	-10,5			
11,0 g/170 gr	0.378	2953	2705	2470	2247	3293	2763	2304	1907	100	-0,3	⊕	-0,9	-3,2	-12,0	0,8	3,4	7,9
# 20**17027**2										150	0,1	0,6	⊕	-1,9	-10,2			
										200	0,5	1,6	1,4	⊕	-7,3			
7,5X55 SWISS																		
ORYX										50	⊕	0,0	-1,8	-5,6	-20,6			
11,7 g/180 gr	0.288	2493	2202	1931	1683	2485	1939	1491	1132	100	0,0	⊕	-1,8	-5,6	-20,6	1,4	5,8	13,9
# 20**17510**2										150	0,6	1,2	⊕	-3,2	-17,0			
										200	1,4	2,8	2,4	⊕	-12,2			

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Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
7.62 RUSSIAN																		
ALASKA										50	⊕	0,0	-1,7	-5,5	-20,3			
11,7 g/180 gr	0.257	2575	2244	1938	1660	2651	2013	1501	1101	100	0,0	⊕	-1,7	-5,5	-20,3	1,5	6,3	15,2
# 20**17555**2										150	0,6	1,2	⊕	-3,2	-16,8			
										200	1,4	2,7	2,4	⊕	-12,1			
308 WIN.																		
NOSLER BST										50	⊕	0,4	-0,4	-2,7	-11,7			
9,7 g/150 gr	0.435	2822	2612	2412	2221	2653	2274	1939	1644	100	-0,2	⊕	-1,1	-3,5	-13,0	0,7	3,1	7,2
# 20**17625**2										150	0,1	0,7	⊕	-2,1	-10,9			
										200	0,7	1,8	1,6	⊕	-7,7			
SWIFT A-FRAME										50	⊕	0,3	-0,9	-3,6	-14,5			
10,7 g/165 gr	0.367	2700	2459	2231	2014	2672	2216	1823	1487	100	-0,2	⊕	-1,3	-4,2	-15,3	0,9	3,9	9,3
# 20**17612**2										150	0,3	0,9	⊕	-2,4	-12,8			
										200	0,9	2,1	1,8	⊕	-9,1			
PLASTIC POINT										50	⊕	0,2	-1,1	-4,2	-16,1			
11,7 g/180 gr	0.366	2612	2375	2151	1939	2728	2255	1849	1503	100	-0,1	⊕	-1,4	-4,6	-16,7	1,0	4,1	9,8
# 20**17628**2										150	0,4	1,0	⊕	-2,7	-13,8			
										200	1,1	2,3	2,0	⊕	-9,8			
NOSLER PARTITION										50	⊕	0,2	-1,0	-3,9	-14,8			
11,7 g/180 gr	0.474	2612	2428	2252	2082	2728	2357	2027	1734	100	-0,1	⊕	-1,4	-4,3	-15,5	0,8	3,1	7,3
# 20**17635**2										150	0,3	0,9	⊕	-2,5	-12,8			
										200	1,0	2,2	1,9	⊕	-9,0			
ALASKA										50	⊕	0,1	-1,4	-4,9	-18,9			
11,7 g/180 gr	0.257	2612	2278	1968	1687	2728	2074	1549	1138	100	-0,1	⊕	-1,6	-5,2	-19,4	1,4	6,2	14,9
# 20**17636**2										150	0,5	1,1	⊕	-3,0	-16,1			
										200	1,2	2,6	2,3	⊕	-11,6			
VULKAN										50	⊕	0,2	-1,2	-4,4	-17,1			
11,7 g/180 gr	0.315	2612	2338	2081	1841	2728	2185	1731	1355	100	-0,1	⊕	-1,5	-4,8	-17,7	1,2	4,9	11,7
# 20**17660**2										150	0,4	1,0	⊕	-2,8	-14,7			
										200	1,1	2,4	2,1	⊕	-10,5			
ORYX										50	⊕	0,2	-1,3	-4,6	-17,8			
11,7 g/180 gr	0.288	2612	2313	2034	1776	2737	2146	1659	1265	100	0,1	⊕	-1,6	-4,9	-18,3	1,3	5,4	13,0
# 20**17675**2										150	0,4	1,0	⊕	-2,9	-15,2			
										200	1,2	2,5	2,2	⊕	-10,9			
30-06																		
NOSLER BST										50	⊕	0,5	-0,2	-2,1	-10,2			
9,7 g/150 gr	0.435	2936	2721	2516	2320	2872	2467	2109	1794	100	-0,3	⊕	-0,9	-3,1	-11,7	0,7	2,9	6,8
# 20**17654**2										150	0,1	0,6	⊕	-1,9	-9,9			
										200	0,5	1,6	1,4	⊕	-7,1			
NOSLER ACCUBOND										50	⊕	0,2	-1,0	-3,7	-14,0			
11,7 g/180 gr	0.507	2674	2499	2331	2169	2859	2497	2172	1881	100	-0,1	⊕	-1,3	-4,1	-14,6	0,7	2,8	6,6
# 20**17563**2										150	0,3	0,9	⊕	-2,4	-12,0			
										200	0,9	2,0	1,8	⊕	-8,5			
SWIFT A-FRAME										50	⊕	0,3	-0,8	-3,5	-14,0			
11,7 g/180 gr	0.400	2700	2478	2267	2067	2924	2464	2062	1713	100	-0,2	⊕	-1,3	-4,1	-14,9	0,9	3,6	8,4
# 20**17518**2										150	0,3	0,8	⊕	-2,4	-12,4			
										200	0,9	2,0	1,8	⊕	-8,8			
ALASKA										50	⊕	0,2	-1,1	-4,2	-17,1			
11,7 g/180 gr	0.257	2700	2359	2044	1755	2914	2225	1670	1231	100	-0,1	⊕	-1,5	-4,7	-17,8	1,4	5,9	14,2
# 20**17648**2										150	0,4	1,0	⊕	-2,8	-14,9			
										200	1,1	2,4	2,1	⊕	-10,7			
NOSLER PARTITION										50	⊕	0,3	-0,7	-3,3	-13,3			
11,7 g/180 gr	0.474	2700	2512	2333	2160	2914	2524	2175	1865	100	-0,2	⊕	-1,2	-3,9	-14,2	0,7	3,0	6,9
# 20**17649**2										150	0,3	0,8	⊕	-2,3	-11,8			
										200	0,8	2,0	1,7	⊕	-8,4			
PLASTIC POINT										50	⊕	0,2	-1,1	-3,9	-15,0			
11,7 g/180 gr	0.366	2700	2458	2229	2013	2914	2416	1987	1620	100	-0,1	⊕	-1,3	-4,3	-15,6	1,0	4,3	10,2
# 20**17653**2										150	0,4	0,9	⊕	-2,5	-12,9			
										200	1,0	2,2	1,9	⊕	-9,2			
VULKAN										50	⊕	0,2	-1,1	-4,1	-15,9			
11,7 g/180 gr	0.315	2700	2420	2158	1912	2924	2350	1868	1466	100	-0,1	⊕	-1,4	-4,5	-16,4	1,1	4,7	11,1
# 20**17659**2										150	0,4	0,9	⊕	-2,6	-13,6			
										200	1,0	2,2	1,9	⊕	-9,7			
ORYX										50	⊕	0,3	-1,0	-4,0	-16,1			
11,7 g/180 gr	0.288	2700	2395	2110	1846	2924	2301	1786	1367	100	-0,1	⊕	-1,4	-4,5	-16,8	1,2	5,1	12,3
# 20**17674**2										150	0,3	0,9	⊕	-2,6	-14,1			
										200	1,0	2,3	2,0	⊕	-10,1			
ORYX										50	⊕	0,2	-1,2	-4,2	-16,4			
13,0 g/200 gr	0.338	2625	2368	2125	1897	3061	2490	2006	1599	100	-0,1	⊕	-1,5	-4,6	-17,0	1,1	4,5	10,7
# 20**17677**2										150	0,4	1,0	⊕	-2,7	-14,1			
										200	1,1	2,3	2,0	⊕	-10,0			

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Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
300 WSM																		
NOSLER BST																		
9,7 g/150 gr	0.435	3215	2985	2767	2560	3437	2963	2547	2179	50	⊕	0,7	0,4	-0,9	-7,1			
# 20**17570**2										100	-0,4	⊕	-0,6	-2,3	-9,2	0,7	2,8	6,6
										150	-0,1	0,4	⊕	-1,5	-7,9			
										200	0,2	1,2	1,1	⊕	-5,7			
BARNES TRIPLE-SHOCK										50	⊕	0,6	0,2	-1,2	-7,6			
9,7 g/150 gr	0.428	3215	2982	2761	2550	3444	2962	2539	2167	100	-0,3	⊕	-0,7	-2,4	-9,4	0,6	2,6	6,1
# 20**17574**2										150	-0,1	0,5	⊕	-1,5	-8,0			
										200	0,3	1,2	1,1	⊕	-5,8			
ORYX										50	⊕	0,4	-0,4	-2,7	-12,6			
11,7 g/180 gr	0.288	2904	2586	2288	2011	3371	2673	2094	1617	100	-0,2	⊕	-1,1	-3,6	-13,9	1,1	4,6	11,1
# 20**17571**2										150	0,1	0,7	⊕	-2,2	-11,8			
										200	0,7	1,8	1,6	⊕	-8,5			
308 NORMA MAG.																		
ORYX										50	⊕	0,4	-0,5	-2,8	-12,4			
11,7 g/180 gr	0.288	2953	2630	2330	2049	3486	2766	2170	1679	100	-0,2	⊕	-1,1	-3,6	-13,5	1,1	4,5	10,8
# 20**17526**2										150	0,2	0,7	⊕	-2,1	-11,4			
										200	0,7	1,8	1,6	⊕	-8,2			
300 WIN. MAG.																		
NOSLER BST										50	⊕	0,7	0,5	-0,8	-6,8			
9,7 g/150 gr	0.435	3248	3017	2798	2590	3515	3033	2609	2235	100	-0,4	⊕	-0,6	-2,2	-8,9	0,6	2,5	5,9
# 20**17551**2										150	-0,2	0,4	⊕	-1,4	-7,7			
										200	0,2	1,1	1,1	⊕	-5,6			
BARNES TRIPLE-SHOCK										50	⊕	0,6	0,2	-1,2	-7,6			
9,7 g/150 gr	0.428	3215	2982	2761	2550	3444	2962	2539	2167	100	-0,3	⊕	-0,7	-2,4	-9,4	0,6	2,6	6,1
# 20**17546**2										150	-0,1	0,5	⊕	-1,5	-8,0			
										200	0,3	1,2	1,1	⊕	-5,8			
NOSLER ACCUBOND										50	⊕	0,4	-0,3	-2,2	-10,0			
11,7 g/180 gr	0.507	2953	2767	2588	2417	3486	3061	2678	2335	100	-0,2	⊕	-0,9	-3,1	-11,3	0,6	2,4	5,7
# 20**17548**2										150	0,1	0,6	⊕	-1,8	-9,5			
										200	0,5	1,5	1,4	⊕	-6,7			
SWIFT A-FRAME										50	⊕	0,5	-0,2	-2,2	-10,7			
11,7 g/180 gr	0.400	2920	2687	2466	2256	3420	2897	2440	2042	100	-0,3	⊕	-1,0	-3,2	-12,2	0,8	3,2	7,5
# 20**17519**2										150	0,1	0,6	⊕	-2,0	-10,3			
										200	0,6	1,6	1,5	⊕	-7,3			
PLASTIC POINT										50	⊕	0,6	0,0	-1,9	-9,8			
11,7 g/180 gr	0.366	3018	2758	2513	2281	3641	3042	2525	2080	100	-0,3	⊕	-0,9	-3,0	-11,5	0,8	3,4	8,0
# 20**17687**2										150	0,0	0,6	⊕	-1,8	-9,8			
										200	0,5	1,5	1,4	⊕	-7,0			
ORYX										50	⊕	0,4	-0,6	-3,0	-12,9			
11,7 g/180 gr	0.288	2920	2600	2301	2023	3409	2702	2117	1636	100	-0,2	⊕	-1,1	-3,7	-13,9	1,1	4,6	11,0
# 20**17547**2										150	0,2	0,7	⊕	-2,2	-11,7			
										200	0,7	1,8	1,6	⊕	-8,4			
ORYX										50	⊕	0,4	-0,6	-3,2	-13,4			
13,0 g/200 gr	0.338	2789	2523	2272	2036	3455	2828	2293	1841	100	-0,2	⊕	-1,2	-3,9	-14,5	1,0	4,1	9,7
# 20**17676**2										150	0,2	0,8	⊕	-2,3	-12,2			
										200	0,8	1,9	1,7	⊕	-8,7			
7,7 JAP.																		
SOFT POINT										50	⊕	-0,1	-2,1	-6,1	-22,1			
11,3 g/174 gr	0.262	2493	2174	1879	1612	2402	1826	1364	1004	100	0,1	⊕	-1,9	-5,9	-21,8	1,5	6,5	15,6
# 20**17725**2										150	0,7	1,3	⊕	-3,4	-17,8			
										200	1,5	3,0	2,5	⊕	-12,9			
7,65 ARG.																		
SOFT POINT										50	⊕	-0,1	-2,1	-6,1	-22,1			
11,3 g/174 gr	0.262	2493	2174	1879	1612	2402	1826	1364	1004	100	0,1	⊕	-1,9	-5,9	-21,8	1,5	6,5	15,6
# 20**17705**2										150	0,7	1,3	⊕	-3,4	-17,8			
										200	1,5	3,0	2,5	⊕	-12,9			
8X57 JRS																		
FULL JACKET										50	⊕	-0,1	-2,1	-6,6	-24,8			
8,0 g/123 gr	0.191	2559	2121	1729	1398	1789	1228	817	534	100	0,1	⊕	-2,0	-6,4	-24,5	2,0	9,0	22,4
# 20**18016**2										150	0,7	1,3	⊕	-3,7	-20,5			
										200	1,6	3,2	2,8	⊕	-15,0			
ORYX										50	⊕	-0,1	-2,1	-6,2	-21,8			
12,7 g/196 gr	0.331	2395	2146	1912	1695	2497	2004	1591	1251	100	0,1	⊕	-1,9	-6,0	-21,5	1,3	5,3	12,6
# 20**18010**2										150	0,7	1,3	⊕	-3,4	-17,6			
										200	1,5	3,0	2,6	⊕	-12,6			
ALASKA										50	⊕	-0,1	-2,1	-6,4	-22,5			
12,7 g/196 gr	0.305	2395	2126	1875	1645	2497	1967	1531	1178	100	0,1	⊕	-2,0	-6,1	-22,2	1,4	5,8	13,8
# 20**18018**2										150	0,7	1,3	⊕	-3,5	-18,3			
										200	1,6	3,1	2,6	⊕	-13,0			

8x57 JRS continues - see next page.

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Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
8X57 JRS																		
VULKAN										50	⊕	-0,1	-2,0	-6,1	-21,4			
12,7 g/196 gr	0.345	2395	2156	1930	1720	2497	2023	1622	1289	100	0,1	⊕	-1,9	-5,9	-21,2	1,2	5,0	12,0
# 2018019**2**										150	0,7	1,3	⊕	-3,4	-17,4			
										200	1,5	3,0	2,5	⊕	-12,3			
8X57 JS																		
ALASKA										50	⊕	0,1	-1,6	-5,2	-19,3			
12,7 g/196 gr	0.305	2526	2248	1988	1747	2778	2200	1720	1328	100	0,0	⊕	-1,7	-5,3	-19,5	1,3	5,3	12,8
# 2018003**2**										150	0,5	1,1	⊕	-3,1	-16,1			
										200	1,3	2,7	2,3	⊕	-11,5			
ORYX										50	⊕	0,1	-1,5	-5,0	-18,6			
12,7 g/196 gr	0.331	2526	2269	2027	1802	2778	2241	1789	1413	100	0,0	⊕	-1,7	-5,2	-18,9	1,2	4,9	11,6
# 2018004**2**										150	0,5	1,1	⊕	-3,0	-15,6			
										200	1,3	2,6	2,2	⊕	-11,1			
VULKAN										50	⊕	0,1	-1,5	-4,9	-18,3			
12,7 g/196 gr	0.347	2526	2281	2049	1832	2778	2264	1828	1461	100	-0,1	⊕	-1,6	-5,1	-18,5	1,1	4,6	11,0
# 2018020**2**										150	0,5	1,1	⊕	-2,9	-15,3			
										200	1,2	2,6	2,2	⊕	-10,9			
NEW! **8X68S** NEW!																		
SWIFT A-FRAME										50	⊕	0,5	-0,2	-2,2	-10,7			
13,0 g/200 gr	0.357	2953	2691	2445	2211	3874	3218	2655	2171	100	-0,2	⊕	-1,0	-3,2	-12,3	0,8	3,6	8,4
# 2018037**2**										150	0,1	0,6	⊕	-2,0	-10,4			
										200	0,6	1,6	1,5	⊕	-7,4			
338 WIN. MAG.																		
ORYX										50	⊕	0,3	-0,9	-3,5	-14,0			
14,9 g/230 gr	0.370	2756	2514	2284	2066	3880	3228	2665	2181	100	-0,1	⊕	-1,3	-4,0	-14,7	0,9	3,8	8,9
# 2018511**2**										150	0,3	0,8	⊕	-2,4	-12,2			
										200	0,9	2,0	1,8	⊕	-8,7			
358 NORMA MAG.																		
ORYX										50	⊕	0,2	-0,9	-3,6	-14,5			
16,2 g/250 gr	0.340	2756	2493	2245	2011	4217	3451	2798	2245	100	-0,1	⊕	-1,3	-4,1	-15,2	1,0	4,2	9,8
# 2019007**2**										150	0,3	0,9	⊕	-2,4	-12,6			
										200	0,9	2,1	1,8	⊕	-9,0			
9,3X57																		
ORYX										50	⊕	-0,3	-2,6	-7,4	-25,5			
15,0 g/232 gr	0.267	2362	2058	1778	1528	2875	2182	1630	1203	100	0,1	⊕	-2,2	-6,8	-24,6	1,6	6,9	16,6
# 2019309**2**										150	0,9	1,5	⊕	-3,8	-20,2			
										200	1,8	3,4	2,9	⊕	-14,5			
ALASKA										50	⊕	-0,7	-3,8	-9,8	-31,6			
18,5 g/285 gr	0.365	2067	1859	1666	1490	2704	2188	1756	1404	100	0,3	⊕	-2,9	-8,5	-29,6	1,3	5,3	12,5
# 2019303**2**										150	1,3	1,9	⊕	-4,7	-23,9			
										200	2,5	4,3	3,5	⊕	-16,8			
9,3X62																		
VULKAN										50	⊕	0,2	-1,3	-4,6	-17,9			
15,0 g/232 gr	0.278	2625	2314	2025	1758	3551	2759	2112	1593	100	-0,1	⊕	-1,5	-4,9	-18,4	1,3	5,6	13,5
# 2019317**2**										150	0,4	1,0	⊕	-2,9	-15,3			
										200	1,2	2,5	2,2	⊕	-11,0			
ORYX										50	⊕	0,1	-1,5	-5,0	-18,8			
15,0 g/232 gr	0.267	2625	2302	2002	1728	3551	2731	2066	1539	100	0,0	⊕	-1,6	-5,1	-19,0	1,4	5,9	14,1
# 2019307**2**										150	0,5	1,1	⊕	-3,0	-15,7			
										200	1,3	2,6	2,2	⊕	-11,3			
SWIFT A-FRAME										50	⊕	0,1	-1,5	-4,8	-18,2			
16,2 g/250 gr	0.285	2625	2322	2039	1778	3826	2993	2309	1755	100	0,0	⊕	-1,6	-5,0	-18,4	1,3	5,4	13,1
# 2019311**2**										150	0,5	1,1	⊕	-2,9	-15,2			
										200	1,2	2,5	2,2	⊕	-10,9			
ORYX										50	⊕	-0,1	-2,1	-6,2	-21,5			
18,5 g/285 gr	0.330	2428	2176	1940	1721	3732	2998	2382	1874	100	0,1	⊕	-1,9	-5,9	-21,0	1,2	5,2	12,3
# 2019313**2**										150	0,7	1,3	⊕	-3,3	-17,2			
										200	1,5	2,9	2,5	⊕	-12,2			
PLASTIC POINT										50	⊕	-0,1	-2,1	-6,3	-21,8			
18,5 g/285 gr	0.365	2362	2138	1926	1728	3538	2898	2352	1894	100	0,1	⊕	-2,0	-6,0	-21,5	1,1	4,8	11,4
# 2019314**2**										150	0,7	1,3	⊕	-3,4	-17,6			
										200	1,6	3,0	2,6	⊕	-12,4			
ALASKA										50	⊕	-0,1	-2,2	-6,3	-21,9			
18,5 g/285 gr	0.365	2362	2137	1925	1727	3532	2891	2345	1887	100	0,1	⊕	-2,0	-6,0	-21,5	1,2	4,8	11,4
# 2019315**2**										150	0,7	1,3	⊕	-3,4	-17,6			
										200	1,6	3,0	2,6	⊕	-12,4			
ORYX NYHET!										50	⊕	-0,2	-2,5	-7,1	-24,2			
21,1 g/325 gr	0.340	2300	2063	1842	1637	3819	3073	2448	1934	100	0,1	⊕	-2,2	-6,6	-23,5	1,3	5,4	12,9
# 2019316**2**										150	0,8	1,4	⊕	-3,7	-19,2			
										200	1,8	3,3	2,8	⊕	-13,6			

BALLISTIC DATA – HUNTING AMMUNITION

Bullet type / Bullets weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second. Muzzle	V_{100}	V_{200}	V_{300}	Energy foot pounds. Muzzle	E_{100}	E_{200}	E_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
9,3X74 R																		
VULKAN										50	⊕	0,1	-1,5	-5,1	-19,3			
15,0 g/232 gr	0.278	2560	2254	1970	1710	3377	2619	2000	1506	100	-0,1	⊕	-1,7	-5,3	-19,6	1,4	5,8	13,9
# 20**19321**2										150	0,5	1,1	⊕	-3,1	-16,3			
										200	1,3	2,6	2,3	⊕	-11,7			
ALASKA										50	⊕	-0,2	-2,3	-6,6	-22,7			
18,5 g/285 gr	0.365	2329	2106	1897	1701	3440	2814	2281	1835	100	0,1	⊕	-2,1	-6,3	-22,2	1,2	4,9	11,7
# 20**19320**2										150	0,8	1,4	⊕	-3,5	-18,1			
										200	1,7	3,1	2,7	⊕	-12,8			
PLASTIC POINT										50	⊕	-0,1	-2,2	-6,3	-21,9			
18,5 g/285 gr	0.365	2362	2137	1925	1727	3532	2891	2345	1887	100	0,1	⊕	-2,0	-6,0	-21,5	1,2	4,8	11,4
# 20**19325**2										150	0,7	1,3	⊕	-3,4	-17,6			
										200	1,6	3,0	2,6	⊕	-12,4			
ORYX										50	⊕	-0,2	-2,4	-6,8	-23,6			
18,5 g/285 gr	0.330	2329	2084	1854	1642	3440	2753	2180	1710	100	0,1	⊕	-2,1	-6,5	-23,1	1,3	5,5	13,1
# 20**19332**2										150	0,8	1,4	⊕	-3,7	-18,9			
										200	1,7	3,2	2,7	⊕	-13,4			
375 H&H MAG.																		
NEW! **BARNES TRIPLE SHOCK**										50	⊕	0,2	-1,2	-4,3	-16,6			
17,5 g/270 gr	0.326	2625	2359	2109	1875	4132	3338	2668	2108	100	-0,1	⊕	-1,5	-4,7	-17,2	1,1	4,7	11,1
# 20**19530**2										150	0,4	1,0	⊕	-2,7	-14,3			
										200	1,1	2,3	2,0	⊕	-10,2			
NEW! **BARNES BANDED SOLID**										50	⊕	0,0	-1,7	-4,5	-20,0			
19,4 g/300 gr	0.307	2493	2220	1964	1727	4141	3282	2569	1987	100	0,0	⊕	-1,8	-5,5	-20,0	1,3	5,4	12,9
# 20**19505**2										150	0,6	1,2	⊕	-3,2	-16,6			
										200	1,4	2,8	2,4	⊕	-11,8			
ORYX										50	⊕	0,0	-1,6	-5,1	-18,6			
19,4 g/300 gr	0.320	2559	2292	2041	1807	4363	3500	2775	2176	100	0,0	⊕	-1,7	-5,2	-18,7	1,2	5,0	11,8
# 20**19520**2										150	0,5	1,1	⊕	-3,0	-15,4			
										200	1,3	2,6	2,2	⊕	-11,0			
NEW! **SWIFT A-FRAME**										50	⊕	0,1	-1,4	-4,8	-18,0			
19,4 g/300 gr	0.325	2559	2296	2049	1819	4363	3514	2798	2204	100	-0,1	⊕	-1,6	-5,0	-18,4	1,2	4,9	11,6
# 20**19503**2										150	0,5	1,1	⊕	-2,9	-15,2			
										200	1,2	2,5	2,2	⊕	-10,8			
416 RIGBY																		
NEW! **BARNES BANDED SOLID**										50	⊕	-0,6	-3,6	-9,2	-29,7			
25,9 g/400 gr	0.388	2097	1900	1715	1545	3907	3207	2613	2121	100	0,3	⊕	-2,7	-8,1	-28,0	1,3	5,4	12,6
# 20**11050**2										150	1,2	1,8	⊕	-4,5	-22,6			
										200	2,3	4,0	3,4	⊕	-15,9			
SWIFT A-FRAME										50	⊕	-0,1	-2,2	-6,4	-22,2			
25,9 g/400 gr	0.367	2349	2126	1916	1720	4902	4017	3262	2628	100	0,1	⊕	-2,0	-6,1	-21,7	1,2	4,8	11,4
# 20**11069**2										150	0,7	1,3	⊕	-3,5	-17,8			
										200	1,6	3,1	2,6	⊕	-12,6			
458 WIN. MAG.																		
NEW! **BARNES BANDED SOLID**										50	⊕	-0,6	-3,8	-9,6	-30,7			
32,4 g/500 gr	0.394	2067	1874	1694	1528	4745	3902	3188	2594	100	0,3	⊕	-2,8	-8,3	-28,8	1,3	5,4	12,6
# 20**11110**2										150	1,2	1,9	⊕	-4,6	-23,2			
										200	2,4	4,2	3,4	⊕	-16,3			
SWIFT A-FRAME										50	⊕	-0,6	-3,5	-9,2	-29,8			
32,4 g/500 gr	0.361	2116	1903	1705	1523	4972	4022	3227	2577	100	0,3	⊕	-2,7	-8,0	-28,1	1,4	5,7	13,6
# 20**11120**2										150	1,2	1,8	⊕	-4,5	-22,7			
										200	2,3	4,0	3,4	⊕	-16,0			

Facts about the Ballistic Data

The velocity and energy data for Norma ammunitions is based on the use of a 24 inch barrel. If your barrel length is longer or shorter, then use the 20-25 fps/inch rule of thumb. Longer barrels will have higher velocity by this amount, shorter barrels, less by the same.

Due to variations in the barrels material, length, wear, measurements etc., stated velocities should only be used as guidelines. We recommend that you always sight-in your gun when changing type of ammunition.

STRATEGIC ALLIANCES

What is a good alliance and how do you define good cooperation? Well, the best cooperation is like a good marriage. One is dependent upon one another and likes each other's company. One is having fun and grow together.

Exactly so is our cooperation with Weatherby Inc. in beautiful Paso Robles in California, USA. Incidentally, did you know that Paso Robles is one of the best wine districts in California?

Our cooperation has lasted for more than 50 years, in bad times as well as good and Weatherby can take credit for much of the positive development of Norma within the field of hunting ammunition. As a result, Norma is probably the largest manufacturer of Magnum calibers in the world.

Fantastic contributions to the development of Norma also come from Nosler in Bend, Oregon and Barnes in American Fork. Utah. Thanks to the support of these two world renowned manufacturers of bullets, Norma enjoys a special position in the industry. Creating a range of hunting ammunition means blending old and new. Traditional bullets are mixed with the latest in technological development and one tries to judge what brand will give the strongest support to Norma's own in the strategic alliance. In the end, it becomes a matter of the heart. With whom is it a pleasure to work?

Nosler and Barnes supply first class bullets, Norma manufactures cartridge cases and loads and Weatherby finally makes sure that a total concept reaches the hunters. Can it get any better?

Torbjörn Lindskog, CEO

WEATHERBY

Brad Ruddell, Weatherby Inc.

Growing up, deer hunting was a big deal in our family. As you might expect there were plenty of arguments over what caliber worked best, however there was complete agreement, that no matter what caliber you shot, you shot the highest performance ammunition available. The men in our camp were lunch bucket, time card punching working men. Money was tight, and deer hunting still provided part of the protein our family would consume each year. They understood, that few things were more important than the ammunition you used. They spent what was necessary to get the best available and never flinched at the price.

Norma has been the supplier of Weatherby ammunition for over 50 years. In that time they have adhered to the premise quality and performance first, cost second.

I've had the good fortune to hunt all over the world with Norma produced Weatherby ammunition. More often than not, success came from the confidence that I knew I was shooting ammunition I could count on.

The men from those early hunting camps are gone now, but their beliefs are no less valid. I'm sure they would be amazed at the ammunition choices we enjoy today. But I know that they would choose the highest performance ammunition available. They would choose Norma ammunition, and if I had any thing to do with it, in Weatherby calibers!

Brad Ruddell,
Vice President,
Sales and Marketing

Weatherby Inc.

NOSLER

John R. Nosler, Nosler Inc.

It is an exciting time for us as hunters and shooters! New products, wonderful performance and cutting edge technology have brought shooting to a new level. It started over 60 years ago, when my Grandfather built the Partition Bullet, a gold standard of hunting.

Norma had the foresight to be first to load it and is featured in the trusted Weatherby brand. It brings to mind "three companies, rich in tradition, bringing to the world the very best ammunition."

That would be the dictionary definition of the alliance between Norma, Nosler and Weatherby. For years, all three companies have put forth their best engineering and ground breaking technology in a joint effort to bring the sportsman near perfection.

Together, these three companies will continue to push the envelope in development and performance. Here is to another 60 years of innovation, it is only the beginning.

Good Shooting,

John R. Nosler, Vice President, General Manager

Nosler, Inc.

BARNES

Randy Brooks, Barnes Bullets, Inc.

Seventy-five years have passed since Fred Barnes began making bullets.

Thanks to the vision, efforts and tireless determination of Randy and Coni Brooks, who purchased the company in 1974, Barnes Bullets has grown to become one of the world's most respected bullet manufacturers. Barnes revolutionized the world of hunting bullets with the introduction of the X-Bullet – a unique, all-copper bullet with a hollow cavity and no lead core. The same innovative concept was used to develop the Triple-Shock, which incorporates a series of precisely positioned rings cut into the bullet's bearing surface. These grooves relieve pressure and virtually eliminate copper fouling. Shooters report excellent accuracy with the Barnes Triple-Shock.

Barnes Solids have long been the number-one choice of experienced hunters. These indestructible bullets won't deform, disintegrate or deflect on heavy bone. The improved Barnes Banded Solids feature multiple bands cut into the shank to relieve pressure. A new nose design tracks straighter through dense bone.

Unexcelled performance makes these bullets the first choice of experienced hunters, guides and professional hunters who hunt dangerous game.

Randy Brooks, VD
Barnes Bullets, Inc.

NORMA JAKTMATCH

It is important that hunters train regularly and therby take responsibility for their own shooting skills. When shooting with Norma Jaktmatch, you know that the same manufaturing skills have gone into it as in the sucessful Norma competition match ammunition.

The Norma sighting-in targets are perfect for this – ask your dealer for details or check our website.

We make precision cartridges for training and competition, plus excellent bird- and small game ammunition.

The Norma Jaktmatch cartridges are loaded to the same rigorous specifications as other Norma hunting- and match cartridges, resulting in very accurate ammunition. All components are first class and naturally, we use only new cases.

The re-loader gets an economically priced case suitable for many highquality reloads.

The FMJ bullets used in the Norma Jaktmatch have an ideal configuration and weight to give minimal recoil and the best possible ballistics in combination with good performance in small game.

Norma continuously develops the Jaktmatch range with new calibers and bullets.

BALLISTIC DATA – JAKTMATCH

	Bullet type / Bullet weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second V_0	V_{100}	V_{200}	V_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
22 LONG RIFLE	LEAD, ROUND NOSE		(V_0)	(V_{25})	(V_{50})	(V_{100})		(25)	(50)	(75)	(100)	(150)			
	2,67 g/40 gr	0.15	1066	1025	989	930	50	0,2	⊕	-2,4	-7,3	-24,5	3,8	-	-
	# 87**15612**0														
222 REM.	FULL JACKET						50	⊕	-0,6	0,0	-2,0	-11,7			
	3,2 g/50 gr	0.192	3199	2697	2247	1843	100	-0,3	⊕	-0,9	-3,3	-13,5	1,5	6,4	15,9
	# 20**15715**0						150	0,0	0,6	⊕	-2,0	-11,7			
							200	0,5	1,6	1,5	⊕	-8,6			
223 REM.	FULL JACKET						50	⊕	0,7	0,4	-1,1	-8,0			
	3,6 g/55 gr	0.272	3300	2933	2594	2279	100	-0,4	⊕	-0,7	-2,5	-10,1	1,0	4,1	9,8
	# 20**15726**0						150	-0,1	0,4	⊕	-1,6	-8,8			
							200	0,3	1,2	1,2	⊕	-6,4			
22-250 REM.	FULL JACKET						50	⊕	0,8	0,7	-0,5	-7,2			
	3,2 g/50 gr	0.192	3609	3061	2575	2138	100	-0,4	⊕	-0,5	-2,2	-9,6	1,3	5,4	13,3
	# 20**15732**0						150	-0,2	0,4	⊕	-1,4	-8,6			
							200	0,1	1,1	1,1	⊕	-6,4			
6,5X55	HOLLOW POINT						50	⊕	0,2	-1,2	-4,3	-16,7			
	6,5 g/100 gr	0.321	2625	2354	2100	1862	100	-0,1	⊕	-1,5	-4,7	-17,3	1,1	4,8	11,3
	# 20**16527**0						150	0,4	1,0	⊕	-2,7	-14,4			
							200	1,1	2,4	2,1	⊕	-10,3			
	FULL JACKET "Elektron/bird"						50	⊕	0,2	-1,4	-5,1	-20,9			
	7,8 g/120 gr	0.428	2690	2238	1833	1482	100	-0,1	⊕	-1,7	-5,4	-21,4	1,9	8,3	20,8
	# 20**16542**0						150	0,5	1,1	⊕	-3,2	-18,1			
							200	1,3	2,7	2,4	⊕	-13,3			
270 WIN.	FULL JACKET						50	⊕	0,4	-0,5	-2,8	-12,1			
	8,4 g/130 gr	0.365	2887	2634	2395	2169	100	-0,2	⊕	-1,1	-3,5	-13,1	0,9	3,6	8,5
	# 20**16907**0						150	0,2	0,7	⊕	-2,1	-11,0			
							200	0,7	1,8	1,6	⊕	-7,8			
270 WSM	FULL JACKET						50	⊕	0,5	0,0	-1,6	-8,8			
	8,4 g/130 gr	0.365	3150	2882	2630	2391	100	-0,3	⊕	-0,8	-2,7	-10,4	0,8	3,2	7,5
	# 20**16931**0*						150	0,0	0,5	⊕	-1,7	-8,9			
							200	0,4	1,4	1,3	⊕	-6,4			
7 MM REM. MAG.	FULL JACKET						50	⊕	0,6	0,0	-1,8	-9,4			
	9,7 g/150 gr	0.443	2995	2780	2576	2380	100	-0,3	⊕	-0,9	-2,9	-11,1	0,7	2,8	6,5
	# 20**17026**0						150	0,0	0,6	⊕	-1,8	-9,4			
							200	0,5	1,5	1,3	⊕	-6,7			
308 WIN.	FULL JACKET						50	⊕	0,3	-0,9	-3,7	-14,5			
	9,7 g/150 gr	0.423	2657	2449	2251	2062	100	-0,1	⊕	-1,3	-4,2	-15,3	0,8	3,4	8,1
	# 20**17622**0						150	0,3	0,9	⊕	-2,5	-12,7			
							200	0,9	2,1	1,8	⊕	-9,0			
30-06	FULL JACKET						50	⊕	0,4	-0,6	-3,0	-12,6			
	9,7 g/150 gr	0.423	2772	2558	2355	2160	100	-0,2	⊕	-1,1	-3,7	-13,7	0,8	3,3	7,6
	# 20**17651**0						150	0,2	0,8	⊕	-2,2	-11,5			
							200	0,7	1,9	1,7	⊕	-8,1			
300 WSM	FULL JACKET						50	⊕	0,4	-0,3	-2,3	-10,6			
	9,7 g/150 gr	0.423	2953	2731	2519	2318	100	-0,2	⊕	-1,0	-3,2	-11,8	0,7	3,0	6,9
	# 20**17573**0*						150	0,1	0,6	⊕	-1,9	-9,9			
							200	0,6	1,6	1,4	⊕	-7,1			

50 cartridge/boxes. *20 cartridge/boxes.

BALLISTIC DATA – JAKTMATCH

	Bullet type / Bullet weight g/gr / Product number	Ball. coeffi-cient	Velocity feet per second V_0	V_{100}	V_{200}	V_{300}	Zero range, yards	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 50	100	150	200	300 yds	Wind drift in inches for a 10 m.p.h cross wind. 100	200	300 yds
300 WIN. MAG.	FULL JACKET						50	⊕	0,6	0,1	-1,5	-8,7			
	9,7 g/150 gr	0.423	3067	2839	2622	2416	100	-0,3	⊕	-0,8	-2,7	-10,5	0,7	2,8	6,6
	# 20**17545**0*						150	0,0	0,5	⊕	-1,7	-9,0			
							200	0,4	1,4	1,3	⊕	-6,4			
8X57 JS	FULL JACKET						50	⊕	0,3	-1,0	-4,1	-18,0			
	8,0 g/123 gr	0.191	2822	2357	1939	1572	100	-0,2	⊕	-1,4	-4,7	-18,9	1,8	7,8	19,3
	# 20**18009**0						150	0,3	1,0	⊕	-2,9	-16,1			
							200	1,0	2,4	2,1	⊕	-11,8			
338 WIN. MAG.	FULL JACKET						50	⊕	0,3	-0,9	-3,5	-13,8			
	14,6 g/225 gr	0.499	2657	2480	2310	2146	100	-0,1	⊕	-1,3	-4,1	-14,7	0,7	2,9	6,7
	# 20**18510**0*						150	0,3	0,9	⊕	-2,4	-12,1			
							200	0,9	2,0	1,8	⊕	-8,6			
9,3X57	FULL JACKET						50	⊕	-0,5	-3,4	-9,0	-30,0			
	15,0 g/232 gr	0.275	2215	1930	1670	1440	100	0,3	⊕	-2,6	-7,9	-28,4	1,7	7,3	17,5
	# 20**19306**0						150	1,1	1,7	⊕	-4,4	-23,2			
							200	2,2	4,0	3,3	⊕	-16,5			
9,3X62	FULL JACKET						50	⊕	-0,1	-1,9	-5,9	-21,1			
	15,0 g/232 gr	0.275	2510	2204	1920	1661	100	0,0	⊕	-1,8	-5,7	-20,9	1,4	6,1	14,6
	# 20**19318**0						150	0,6	1,2	⊕	-3,3	-17,3			
							200	1,5	2,9	2,5	⊕	-12,4			

50 cartridge/boxes. *20 cartridge/boxes.

Leading gun manufacturers who chose Norma!

Several of the world's leading gun manufacturers use Norma as reference ammunition to check and regulate their firearms.

Jarrett · Česká Zbrojovka · Krieghoff · Blaser · Bleiker · Dakota Arms · Demas · Verney-Carron · Franz Seehuber · Shultz & Larsen · sako · Weatherby

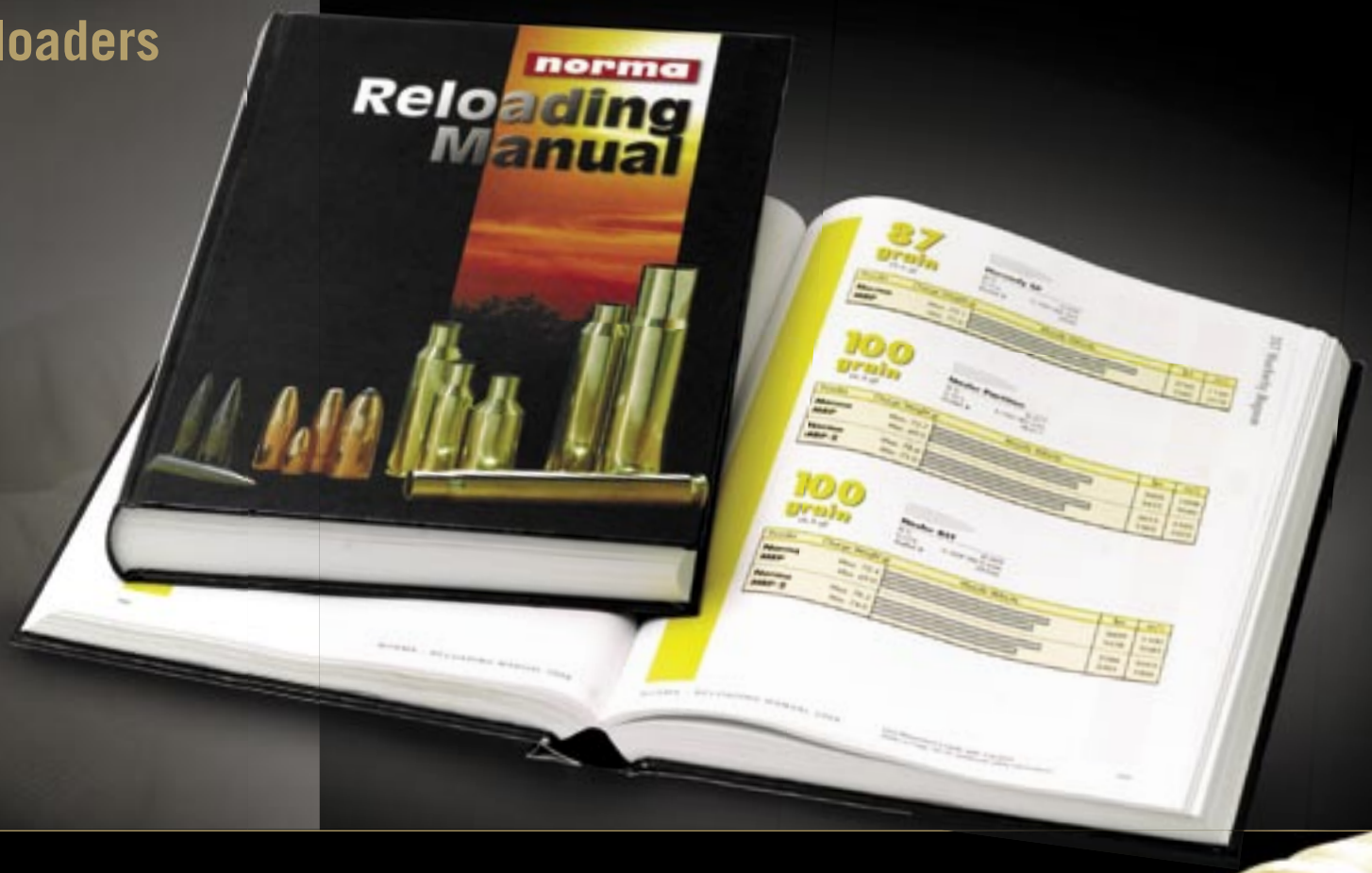
Norma's OEM-customers

For many years, Norma has manufactured cases for a large number of ammunition makers around the world.

THE NORMA RELOADING MANUAL – for hand loaders

The Norma Reloading Manual is a must for the keen hand loader. It is full of history, good advice and loads using Norma bullets and powders. It ought to be on every loading bench.

Every hunter and shooter can always learn something new and find the best possible load for their particular needs.



WEATHERBY nation

Support Your "Nation." There's an exciting new online community you won't want to miss. Weatherby Nation is a place for hunters and shooters like you to swap stories and photos, talk shop, and show off your trophies. You'll also get the inside scoop on new offerings from Weatherby and Norma, live chat events and more. All this, and it's FREE to join.

Weatherby Nation is a living, breathing place, where the chatter ebbs and flows and everyone has the chance to be heard. The "Nation" is yours. Join today at **weatherbynation.com**

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Caliber 5,7 mm (.224")	Hunting
	SOFT POINT Weight 3,2 g/50 gr Product # 20**65701** 1 (-2)*
	FULL JACKET Weight 3,2 g/50 gr Product # 20**65702** 1 (-2)*
	SOFT POINT Weight 3,4 g/53 gr Product # 20**65704** 1
NEW!	**ORYX** Weight 3,6 g/55 gr Product # 20**65713** 1
	SOFT POINT Weight 4,0 g/62 gr Product # 20**65705** 1
Caliber 6 mm (.243")	**Hunting**
	ORYX Weight 6,5 g/100 gr Product # 20**66050** 1
	SOFT POINT Weight 6,5 g/100 gr Product # 20**66003** 1
Caliber 6,5 mm (.264")	**Match**
	HOLLOW POINT Weight 6,5 g/100 gr Product # 10**66520** 1 [1)]
	HOLLOW POINT Weight 8,4 g/130 gr Product # 10**66509** 1 [1)]
	DIAMOND LINE Weight 8,4 g/130 gr Product # 10**66508** 1 [1)]
Caliber 6,5 mm (.264")	**Hunting**
	HOLLOW POINT Weight 6,5 g/100 gr Product # 20**66520** 1
	FULL JACKET Weight 7,8 g/120 gr Product # 20**66514** 1
	ORYX Weight 10,1 g/156 gr Product # 20**66524** 1
	ALASKA Weight 10,1 g/156 gr Product # 20**66532** 1
	VULKAN Weight 10,1 g/156 gr Product # 20**66535** 1
Caliber 270 (.270")	**Hunting**
	FULL JACKET Weight 8,4 g/130 gr Product # 20**66931** 1
	ORYX Weight 9,7 g/150 gr Product # 20**66950** 1
NEW!	**VULKAN** Weight 10,1 g/156 gr Product # 20**66935** 1

Caliber 7 mm (.284")	Hunting
	FULL JACKET Weight 9,7 g/150 gr Product # 20**67003** 1
	ORYX Weight 10,1 g/156 gr Product # 20**67004** 1
	VULKAN Weight 11,0 g/170 gr Product # 20**67006** 1
Caliber 30 (.308")	**Match**
	DIAMOND LINE Weight 10,9 g/168 gr Product # 10**67635** 1
Caliber 30 (.308")	**Hunting**
	FULL JACKET Weight 9,7 g/150 gr Product # 20**67651** 1 (-2)*
	ALASKA Weight 11,7 g/180 gr Product # 20**67648** 1
	VULKAN Weight 11,7 g/180 gr Product # 20**67653** 1
	ORYX Weight 11,7 g/180 gr Product # 20**67638** 1
	ORYX Weight 13,0 g/200 gr Product # 20**67639** 1
Caliber 8 mm (.323")	**Hunting**
	FULL JACKET Weight 8,0 g/123 gr Product # 20**68014** 1
	ORYX Weight 12,7 g/196 gr Product # 20**68001** 1
	ALASKA Weight 12,7 g/196 gr Product # 20**68003** 1
	VULKAN Weight 12,7 g/196 gr Product # 20**68020** 1

Caliber 338 (.338")	Hunting
	FULL JACKET Weight 14,6 g/225 gr Product # 20**68610** 1
	ORYX Weight 14,9 g/230 gr Product # 20**68616** 1 50 bullets/box
Caliber 358 (.358")	**Hunting**
	ORYX Weight 16,2 g/250 gr Product # 20**69007** 1 50 bullets/box
Caliber 9,3 mm (.366")	**Hunting**
	FULL JACKET Weight 15,0 g/232 gr Product # 20**69306** 1
	VULKAN Weight 15,0 g/232 gr Product # 20**69305** 1
	ORYX Weight 15,0 g/232 gr Product # 20**69307** 1
	ORYX Weight 18,5 g/285 gr Product # 20**69308** 1 50 bullets/box
	ALASKA Weight 18,5 g/285 gr Product # 20**69316** 1 50 bullets/box
NEW!	**ORYX** Weight 21,1 g/325 gr Product # 20**69312** 1 50 bullets/box
Caliber 375 (.375")	**Hunting**
	ORYX Weight 19,4 g/300 gr Product # 20**69507** 1 50 bullets/box

Standard = 100 bullets/box • (-2)* = Packed 2x500 bullets/box. • [1)] = Packed 2x500 bullets/box.

NORMA BULLETS

Norma makes bullets for every purpose. For hunting big game, Oryx is a winner, while the tradition bound hunter can continue downing his moose with the classic Alaska. For rapid expansion and instantaneous effect, choose the Vulkan or the Soft Point.

For practice, competition and hunting birds there are the Full Metal Jacket bullets – in a steadily growing selection. Match shooters load their ammunition with the Diamond Line bullets.

NORMA CASES – SECOND TO NONE!

> Norma's brass is not only good, it is exceptional.

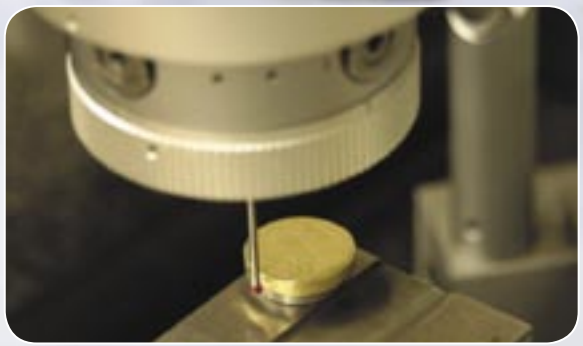
Quote from a US ammunition producer.

Norma products are known worldwide for high quality. Cartridge cases are a significant factor for this reputation. Superior quality ensures long life and many reloads. The choice of raw materials and the numerous checks of weight and dimensions during manufacture, guarantee high quality.

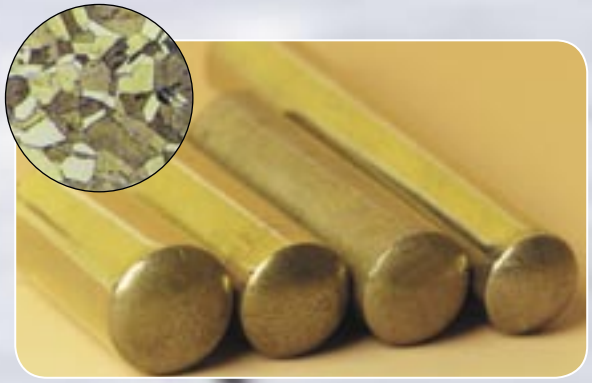
Caliber	Prod. no	Caliber	Prod. no
204 Ruger NEW!	# 20**25510**1	338 Winchester Mag.	# 20**28504**1
222 Remington	# 20**25711**1	338 Lapua Mag.	# 10**28507**1
223 Remington	# 20**25721**1	35 Whelen NEW!	# 20**29002**1
22-250 Remington	# 20**25731**1	358 Norma Mag.	# 20**29001**1
220 Swift	# 20**25701**1	9,3x57	# 20**29301**1
6 mm Norma BR	# 10**26015**1	9,3x62	# 20**29311**1
6XC NEW!	# 10**26018**1	9,3x74 R	# 20**29321**1
243 Winchester	# 10**26001**1	375 H&H Mag.	# 20**29501**1
6,5 Jap.	# 20**26531**1	404 Jeffery	# 20**21043**1
6,5 Carcano	# 20**26535**1	416 Rigby	# 20**21060**1
260 Remington NEW!	# 20**26602**1	45 Basic	# 20**21123**1
6,5x55	# 20**26551**1	45-120 NEW!	# 20**21125**1
6,5-284 Norma	# 20**26528**1	458 Win. Mag.	# 20**21155**1
270 Winchester	# 20**26901**1	458 Lott	# 20**21157**1
270 WSM	# 20**26907**1	470 Nitro Express	# 20**21163**1
7x57 R	# 20**27004**1		
7x57	# 20**27001**1		
7 mm-08 Remington	# 20**27022**1		
7x65 R	# 20**27018**1		
280 Remington	# 20**27050**1	**Norma cases for the Weatherby Magnums**	
7x64	# 20**27012**1		
7 mm Rem Mag.	# 20**27021**1	224 Wby. Mag.	# 20**25740**1
7,5x55 Swiss	# 20**27511**1	240 Wby. Mag.	# 20**26020**1
7,62x53 Russian	# 20**27634**1	257 Wby. Mag.	# 20**26502**1
308 Winchester	# 20**27623**1	270 Wby. Mag.	# 20**26912**1
30-06	# 20**27640**1	7 mm Wby. Mag.	# 20**27032**1
300 SAUM NEW!	# 20**27611**1	300 Wby. Mag.	# 20**27660**1
300 WSM	# 20**27676**1	30-378 Wby. Mag.	# 20**27677**1
300 H&H Mag. NEW!	# 20**27653**1	338-06 Wby. Mag.	# 20**28511**1
308 Norma Mag.	# 20**27637**1	338-378 Wby. Mag.	# 20**28516**1
300 Winchester Mag.	# 20**27666**1	340 Wby. Mag.	# 20**28602**1
7,65 Arg.	# 20**27701**1	375 Wby. Mag. NEW!	# 20**29513**1
7,7 Jap	# 20**27721**1	378 Wby. Mag.	# 20**29512**1
8x57 JRS	# 20**28014**1	416 Wby. Mag.	# 20**21065**1
8x57 JS	# 20**28001**1	460 Wby. Mag.	# 20**21160**1

Norma unprimed cases are packed in boxes of 50 or 100 each.

Norma uses brass comprising 72% copper and 28% zinc. All incoming raw material is checked and double checked before being released for production.



The Norma control stations always verify the correct weight, volume and exact dimensions to achieve the highest possible quality.



The granular structure and hardness of the finished case is measured at 27 different points over the full case length.

The case is the part that keeps the cartridge together. It is one of the most important components, but unlike the others, it can be reloaded and used again.

For a long life and many reloads, high quality is important. Norma cases have the best possible quality raw materials, the most narrow tolerances and deliver accuracy round after round. The fact that well known ammunition manufacturers all over the world load their own ammunition using Norma made cases is only one of many examples proving our point!

Using Norma components, you can tailor your ammunition perfectly to your needs.

Reload with Norma cases and components, practice and become a better hunter.

To manufacture the world's best cases, it is essential that all stages be done carefully, as e.g. drilling the flashhole at dead center of the primer pocket.

NORMA POWDERS

By using Norma powder you can safely trust that loading data, pressure, velocity and accuracy are maintained at the same high level from lot to lot.

A flexible range of powders offers the hand loader many opportunities to load the best possible cartridges in his choice of caliber.

NORMA 200 POWDER

Our fastest gunpowder is suitable for smaller cartridges such as 222 Rem and 22 Hornet.

It can also be used to shoot lightweight, low velocity bullets in medium calibers such as the 308 Win.

500 g/canister.
Prod. # 20**93200**5

NORMA 201 POWDER

Very suitable for calibers with small case volume in relation to the caliber such as 9,3x57 and 45-70. It's also the right choice for shooting lightweight bullets in medium sized cases such as 30-06.

500 g/canister.
Prod. # 20**93201**5

NORMA 202 POWDER

Specially developed to provide maximum performance in 308 Win.

A very useful powder for cases with medium capacity compared to caliber such as 8x57, 9,3x62 and 9,3x74 R.

500 g/canister.
Prod. # 20**93202**5

NORMA 203B POWDER

Specifications differ slightly from the previous 203 powder.

A flexible powder that is useful from 22-250 to 358 Norma Mag. Very suitable for 6 mm Norma BR and 308 Winchester loaded with heavier bullets.

500 g/canister.
Prod. # 20**93203**5

NORMA URP POWDER

A high-energy, mid-range powder. Excellent choice for medium sized cartridges such as 7x64 and 30-06.

500 g/canister.
Prod. # 20**93219**5

NORMA 204 POWDER

A slow-burning powder that provides good performance and often quite good accuracy in calibers such as 6.5x55 and 30-06.

500 g/canister.
Prod. # 20**93204**5

NORMA MRP POWDER

A very flexible "magnum powder". Suitable for a number of calibers with relatively large case volume in relation to the caliber.

Well-known for many years as a high performance powder in all magnum calibers.

500 g/canister.
Prod. # 20**93215**5

NORMA MRP2 POWDER

The perfect choice for over bore calibers such as 6.5-284, 6.5-06 and Weatherby cartridges.

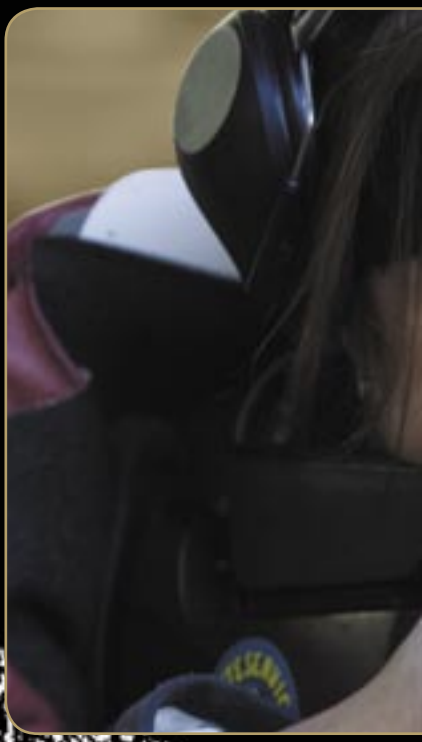
500 g/canister.
Prod. # 20**93216**5

NORMA MATCH POWDER 1211

500 g/canister. # 10**93211**5

NORMA MATCH POWDER 1214

500 g/canister. # 10**93214**5



TEAM NORMA MATCH

Norma cooperates with many of the leading Match shooters in the world. Continuous development through testing and in competitions gives Norma Match Ammunition the greatest accuracy and shooters their highest scores!

600 points with 6XC Diamond Line
Pattern shot by Johan Gustavsson in Tolmezzo, Italy during the European Cup, 2007

DAVID TUBB
and the idea behind 6XC!

David Tubb, USA

David Tubb, 11 times NRA High Power Champion and 5 times NRA Long Range Champion!

In order to compete, using a better cartridge than the most common Match rounds for rifles with short magazines and actions, David developed the 6XC.

It has the perfect case volume in 6 mm for super-accuracy, very good ballistics, limited recoil and acceptable bore wear.

NORMA MATCH RANGE
for range and field

Norma always participates in championships with medals as a goal. Our match ammunition is made according to the "unsurpassed accuracy" specification. The development towards even better ammunition continues. The latest addition to the range is the 6XC which will result in many more perfect scores for Norma.

6,5x55 Norma Sierra

The Norma range of Match cartridges now includes the Norma Sierra. These are loaded with 144 grains Sierra Match Kings, perhaps the best known American 6,5 mm match bullet.

6,5x55 Banskytte/Rekrutt

This is an accurate training and competition round with low recoil and excellent results at a low price. It is loaded with a 100 grains un-coated hollow point.

308 Win. Golden Target

This new 308 Win. Match cartridge is loaded with a 150 grains un-coated FMJ bullet and provides Match accuracy at lower price than 308 Diamond Line.

6,5x55 Golden Target Bana & Fält

This is an all-round cartridge for match and fieldshooting competition, loaded with a 130 grains un-coated hollow point. It provides top accuracy but costs less.

30-06 Golden Target

A 30-06 match cartridge with very good accuracy. Loaded with an un-coated 150 grains FMJ.

6,5x55 Diamond Line Bana

Superior ammunition for National Match Shooting, perfect muzzle velocity and high BC give low drift and maximum accuracy. Low recoil. Moly-coated 130 grains Hollow Points for long barrel life.

6,5x55 Diamond Line Fält

A top field shooters' favourite, loaded for maximum accuracy at long distances. High muzzle velocity and BC give low trajectory and minimal drift. Moly-coated 130 grains Hollow Points for long barrel life.

6 mm Norma BR

For ten years, the dominant cartridge in international Match events! The 6 mm Norma BR is the perfect combination of extreme accuracy, minimal drift and recoil. It is the most frequently used round for major international championships. Moly-coated Hollow Points weighing 105 grains.

308 Win. Match

The classic cartridge for international match competitions with standard- and free rifles. Loaded with a 168 grains Moly-coated Hollow Points bullet.

NORMA DIAMOND LINE
– maximum accuracy – less barrel wear!

The Norma Diamond Line cartridges are loaded with match quality bullets coated with molybdenum disulfide and wax. The coating reduces friction and barrel wear, resulting in uniform velocity, less pressure and maximum accuracy.

Magdaléna Milcová
Czech World Class Competition Shooter

Magdalena Milcova is a member of the CZUB Shooting Team and has won several medals in recent years in Sniper Competitions. Her target rifle is a CZ 750 and the ammunition 308 Winchester, Norma Diamond Line Match, 168 grain.

Magdaléna Milcová, Czech Republic

Norma develops together with the world's elite!

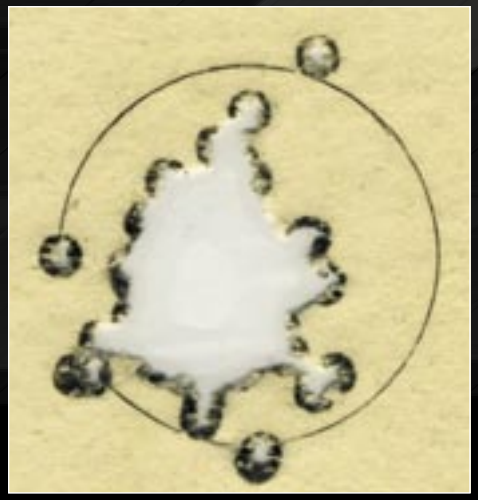
Since the beginning of the 90's Norma has developed match products together with some of the world's leading shooters. Johan Gustavsson and Michael Larsson are two of those who, in cooperation with Norma, have tested and introduced world class match cartridges.

The international Norma team has field tested the products for several years before launched them on the market.

The latest Match cartridge to be introduced was the 6XC. This cartridge has already scored the maximum 600 points three times and won gold, silver and bronze medals at European Champion-ships – every time with factory loaded ammunition. The crowning glory is the Swedish team victory at the European Championships in Granada, Spain 2007.

Johan Gustavsson

Michael Larsson



600 points with the 6XC Diamond Line

Pattern shot on January 17, 2007 during development of 6XC.

Bullet: 105 grains Berger.

Muzzle velocity: 2789 feet/sec

Distance: 300 m

No. of rounds: 60

Rajmond Debevec, Slovenia

Rajmond Debevec, born in Slovenia, became involved in shooting sports in 1971 and became a member of the Junior National Team in 1979. He represented Yougoslavia at the Olympic Games in 1984 and 1988, and Slovenia in 1992, 1996, 2000 and 2004. His most important victory was the gold medal in Sydney 2000 at 50 meters.

Marcel Bürge, Schweiz

Marcel Bürge, born in Switzerland, holds several Swiss, European and World Champion titles. He shoots both 50 m and 300 m, and holds the World Record of Standard Rifle 3x20, both individually and as part of a team. And he is also the holder of the Swiss record with 1183pt., shot in a 300 m Free Rifle competition at the European Cup.

Vebjørn Berg, Norway

Is one of many good Norwegian shooters who use Norma for national and international events. Vebjörn is a complete shooter who masters all disciplines in top level shooting. He is several times Championship winner of major events, such as the Nordic-, European-, World- and CISM Championships.

Johan Gustavsson and Stefan Alesved, Sweden

Two shooters who managed to score 600 points at the European Championships in 2007. Johan did so at Tolmezzo in Italy, both during the qualifying round and in the finals! Stefan got his 600 points in Plzen in the Czech Republic. Both shoot the 6XC.

Michael Larsson, Stefan Alesved and Anders Brolund, Sweden

The Swedish National Team which, in 2007 won the Team gold medal in Granada, Spain shooting the 6XC.

Hans Kristian Wear, Norway

One of Norway's most outstanding shooters. Proof of this is his victory in the Nordic Championships in 2007 as well as his scores in the international ISSF and CISM competitions. Hans Kristian was a member of the Norwegian CISM World Championship Team 2007. At that time, he won both the Team Gold and individual Rapid Fire gold medals. He shoots the 6.5x55 Diamond Line, 6 mm BR and 6XC.

Ole Tore Dokken, Norway

World Champion, Military Standard Rifle, 3x20 Team, Norwegian Champion and winner of the Konge-pokalen (King's –Cup) in 2004 with a record score. He shoots the 6.5x55 Diamond Line.

BALLISTIC DATA – MATCH

		Product name Bullets type Product number	Ball. coeffi-cient	Bullets weight grains	gram	Velocity feet per second. Muzzle	Barrel lenght inch	Height of trajectory above line of sight if sighted in at ⊕ yards. For sights 1,6 inch above bore. 100	200	300	400	500	600 yds	Wind drift in inches for a 10 m.p.h cross wind. 300	600 yds
6 MM NORMA BR		DIAMOND LINE BERGER Coated hollow point # 10**160162**	0,517	105	6,8	2789	26	4,2	5,0	⊕	-11,4	-30,2	-57,5	5,5	24,3
6XC		NEW! DIAMOND LINE 6XC Coated hollow point # 10**160182**	0,517	105	6,8	3018	26	3,5	4,2	⊕	-9,8	-26,1	-49,9	5,4	23,8
6,5X55		DIAMOND LINE FÄLT Coated hollow point # 10**165300**	0.548	130	8,4	2986	29	3,5	4,2	⊕	-9,9	-26,2	-49,8	4,6	20,3
6,5X55		DIAMOND LINE BANA Coated hollow point # 10**165000**	0.548	130	8,4	2723	26	4,5	5,3	⊕	-12,1	-32,2	-61,3	5,3	23,3
				130	8,4	2788	29	4,2	5,0	⊕	-11,5	-30,5	-58,1	5,1	22,5
308 WIN.		DIAMOND LINE MATCH Coated hollow point # 10**176152**	0.470	168	10,9	2549	26	5,5	6,4	⊕	-14,9	-39,8	-76,6	7,6	34,5
6,5X55		BANSKYTTE/REKRUTT Hollow point # 10**165230**	0.345	100	6,5	2625	29	5,6	6,7	⊕	-16,3	-44,9	-89,3	11,0	50,1
6,5X55		GOLDEN TARGET Hollow point # 10**165130**	0.548	130	8,4	2723	29	4,5	5,3	⊕	-12,1	-32,2	-61,3	5,3	23,3
6,5X55		NEW! NORMA SIERRA Hollow point Sierra # 10**165470**	0.580	144	9,3	2559	29	5,2	6,0	⊕	-13,7	-36,1	-68,6	6,0	26,5
308 WIN.		NEW! GOLDEN TARGET Full jacket # 10**175230**	0.438	150	9,7	2723	29	4,7	5,6	⊕	-13,2	-35,5	-68,6	7,5	34,0
30-06		NEW! GOLDEN TARGET Full jacket # 10**175630**	0.438	150	9,7	2789	29	4,5	5,3	⊕	-12,5	-33,6	-64,9	7,2	32,9

50 catridges/box.

NORMA
22 Long Rifle

Norma Match 1 are selected cartridges of the highest quality for shooters with the most exacting demands.

Norma Training 2 – reasonably priced quality ammunition for practice and competition.

Caliber Bullets weight gram/grains Productnumber	Bullet type Ball. coefficient	Velocity feet per second in yards Muzzle	V_{25}	V_{50}	V_{100}	Zero range, yards	Height of trajectory above line of sight. 25	50	75	100	150 yards	Wind drift 100 yds
22 LR MATCH 1 2.6 g/40 gr # 8715613 0	Lead, Round nose 0,15	1066	1025	989	930	50	0,2	⊕	-2,4	-7,3	-24,5	3,8
22 LR TRAINING 2 2.6 g/40 gr # 8715614 0	Lead, Round nose 0,15	1066	1025	989	930	50	0,2	⊕	-2,4	-7,3	-24,5	3,8

50 cartridge/boxes

PROMOTIONAL PRODUCTS

Sold through retails stores:

1. **Cap** ..... Prod. # **66040101**
2. **T-shirt**
   Prod. # **66040100** ..... M, L, XL
3. **Turtle-neck neck sweater**
   Prod. # **66040121** ..... M, L, XL
4. **Piqué shirt**
   Prod. # **66040107** ..... M, L, XL
5. **Knife** ..... Prod. # **66040109**
6. **Bag** ..... Prod. # **66040102**
7. **Thermos flask** ... Prod. # **66040108**
8. **Bullets board** .... Prod. # **66040111**

8. Product display. This exclusive Norma display shows 102 bullets and 36 cartridges on a velvet background and with gold covered frame. Size 75x55 cm.

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norma

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